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**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA**

Cung Le, Nathan Quarry, and Jon Fitch, Brandon
Vera, Luis Javier Vazquez, and Kyle Kingsbury,
on behalf of themselves and all others similarly
situated,

Plaintiffs,

v.

Zuffa, LLC, d/b/a Ultimate Fighting
Championship and UFC,

Defendant.

Case No.: 2:15-cv-01045-RFB-(PAL)

**PLAINTIFFS' CONSOLIDATED BRIEF IN
OPPOSITION TO DEFENDANT ZUFFA,
LLC'S MOTION TO EXCLUDE THE
TESTIMONY OF DRS. HAL SINGER AND
ANDREW ZIMBALIST (ECF NOS. 522, 524)**

HEARING REQUESTED

TABLE OF CONTENTS

GLOSSARY OF ABBREVIATIONS	xiii
ROADMAP OF PLAINTIFFS' RESPONSES TO DEFENDANT'S ARGUMENTS.....	xiv
I. INTRODUCTION AND SUMMARY OF ARGUMENT	1
II. DRS. SINGER AND ZIMBALIST HAVE EXCELLENT CREDENTIALS	3
III. SUMMARY OF THE OPINIONS OF DRS. SINGER AND ZIMBALIST	6
IV. THE <i>DAUBERT</i> STANDARD.....	9
V. ZUFFA'S <i>DAUBERT</i> ATTACKS ON DR. SINGER LACK MERIT	10
A. Dr. Singer's Analysis Based on Wage Share Is Proper	10
1. Wage Share Is Widely Used in Assessing Compensation of Athletes.	11
2. Wage Share Can Be Used to Assess Changes in Monopsony Power <i>and</i> its Existence.	12
3. Zuffa's Claim that Dr. Singer's Use of Wage Share Is Not "Standard" Is Incorrect and Misses the Point.	14
4. Dr. Singer Has a Sound Empirical Basis for Using Changes in Event Revenues as a Proxy for Changes in Fighter Productivity.....	19
B. Dr. Singer Does Not Assume Market Foreclosure; He Proves It.....	25
C. Dr. Singer's Inclusion of Strikeforce Data in his Regressions Is Proper	29
D. Dr. Singer's Opinions "Related to Damages Analysis" Should Be Admitted	31
1. Dr. Singer's Analysis Is Sufficiently Specific about the But-For World..	31
2. Dr. Singer's "But-For" World Is Rational.....	33
E. Dr. Singer's Strikeforce and Bellator Benchmarks Are Appropriate	34
F. Dr. Singer's Identity Class Damages Calculation Is Reliable and Proper	35
G. Dr. Singer's Analyses of Market Power Are Reliable.....	36
1. Dr. Singer Uses Direct and Indirect Evidence to Show Market Power....	37
2. Dr. Singer's Direct Proof of Market Power Is Reliable.	37
3. Dr. Singer Offers Reliable Indirect Proof of Market Power.	41
4. Zuffa's Criticisms of Dr. Singer's Relevant Markets.....	42
5. Dr. Singer Uses Reliable Methods to Measure Zuffa's Market Share.	48
VI. ZUFFA'S <i>DAUBERT</i> ATTACKS ON DR. ZIMBALIST LACK MERIT	50

TABLE OF CONTENTS (cont.)

1	A.	Dr. Zimbalist’s Yardstick Method for Calculating Damages Is Reliable	51
2	B.	Dr. Zimbalist Selects Proper Yardsticks that Are Comparable to MMA	52
3	C.	Dr. Zimbalist Controls for Differences between his Yardsticks and the UFC	56
4	D.	Dr. Zimbalist’s Use of an Average Is Appropriate	59
5	E.	Dr. Zimbalist’s Yardsticks Properly Measure the Damages Zuffa Caused	59
6	F.	Dr. Zimbalist’s Boxing Data Reliably Measures Wage Share in Boxing	62
7	VII.	CONCLUSION	63

TABLE OF AUTHORITIES

CASES

<i>AD/SAT, Div. of Skylight, Inc. v. Associated Press</i> , 181 F.3d 216 (2d Cir. 1999)	45
<i>AFMS LLC v. United Parcel Serv. Co.</i> , No. 10-cv-5830, 2014 WL 12515335 (C.D. Cal. Feb. 5, 2014).....	44
<i>Allgood v. Gen. Motors Corp.</i> , No. 1:02-cv-1077, 2006 WL 2669337 (S.D. Ind. Sept. 18, 2006)	54, 55
<i>Allied Orthopedic Appliances, Inc. v. Tyco Health Care Grp.</i> , 592 F.3d 991 (9th Cir. 2010)	34
<i>Altana Pharma AG v. Teva Pharms. USA, Inc.</i> , No. 04-cv-2355, 2013 U.S. Dist. LEXIS 74210 (D.N.J. May 14, 2013).....	22
<i>Apotex, Inc. v. Cephalon, Inc.</i> , 321 F.R.D. 220 (E.D. Pa. 2017)	4
<i>Apple iPod iTunes Antitrust Litig.</i> , No. 05-cv-0037, 2014 WL 4809288 (N.D. Cal. Sept. 26, 2014).....	16, 24
<i>Apple, Inc. v. Samsung Elecs. Co.</i> , No. 11-cv-01846, 2012 WL 2571332 (N.D. Cal. June 30, 2012).....	60
<i>Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc.</i> , 789 F. Supp. 2d 1201(C.D. Cal. 2011)	28
<i>Authenticom, Inc. v. CDK Global, LLC</i> , No. 17-cv-318, 2017 WL 3017048 (W.D. Wisc. July 14, 2017).....	4
<i>Bazemore v. Friday</i> , 478 U.S. 385 (1986)	24
<i>Bernstein v. Virgin Am., Inc.</i> , No. 15-cv-2277, 2016 U.S. Dist. LEXIS 154326 (N.D. Cal. Nov. 7, 2016).....	24
<i>Bigelow v. RKO Radio Pictures, Inc.</i> , 327 U.S. 251 (1946)	32, 52, 53
<i>Blue Cross & Blue Shield United of Wisc. v. Marshfield Clinic</i> , 152 F.3d 588 (7th Cir. 1998)	57
<i>Butler v. Home Depot</i> , No. 94-cv-4335, 1997 U.S. Dist. LEXIS 16296 (N.D. Cal. Aug. 28, 1997).....	24

TABLE OF AUTHORITIES (cont.)

<i>Cabrera v. Cordis Corp.</i> , 134 F.3d 1418 (9th Cir. 1998)	10, 18
<i>Carrillo-Gonzalez v. INS</i> , 353 F.3d 1077 (9th Cir. 2003)	14, 19, 24
<i>CDW LLC v. NETech Corp.</i> , No. 1:10-cv-00530, 2014 WL 272167 (S.D. Ind. Jan. 24, 2014)	59
<i>Comcast Corp. v. Behrend</i> , 569 U.S. 27 (2013)	32
<i>Concord Boat Corp. v. Brunswick</i> , 207 F.3d 1039 (8th Cir. 2000)	34, 60
<i>Cont'l Ore Co. v. Union Carbide & Carbon Corp.</i> , 370 U.S. 690 (1962)	33, 34, 60
<i>Cont'l T.V. Inc. v. GTE Sylvania, Inc.</i> , 433 U.S. 36 (1977)	37
<i>Cooper v. Brown</i> , 510 F.3d 870 (9th Cir. 2007)	9
<i>Craftsmen Limousine, Inc. v. Ford Motor Co.</i> , 363 F.3d 761 (8th Cir. 2004)	40
<i>Daiichi Pharmaceutical Co., Ltd v. Apotex, Inc.</i> , No. 03-937, 2005 WL 7979497 (D.N.J. Nov. 1, 2005)	46
<i>Daubert v. Merrell Dow Pharm.</i> , 43 F.3d 1311 (9th Cir. 1995)	18
<i>Daubert v. Merrell Dow Pharms., Inc.</i> , 509 U.S. 579 (1993)	9, 16
<i>Deutscher Tennis Bund v. ATP Tour Inc.</i> , No. 07-cv-00178, 2003 WL 25832906 (D. Del. Sept. 26, 2003)	5
<i>Doan v. Astrue</i> , No. 04-cv-2039, 2010 WL 234935 (S.D. Cal. Jan. 12, 2010)	62
<i>Dolphin Tours, Inc. v. Pacifico Creative Serv. Inc.</i> , 773 F.2d 1506 (9th Cir. 1985)	39
<i>Domingo ex rel. Domingo v. T.K.</i> , 289 F.3d 600 (9th Cir. 2002)	9

TABLE OF AUTHORITIES (cont.)

1	<i>Dover v. British Airways, PLC (UK),</i>	
2	254 F. Supp. 3d 455 (E.D.N.Y. 2017)	39
3	<i>DuBray Land Servs. v. Schroder Ventures U.S.,</i>	
4	488 F. Supp. 2d 1109 (D. Mont. 2007)	14, 15
5	<i>Edwards v. Nat'l Milk Producers Fed'n,</i>	
6	No. 11-cv-04766, 2014 U.S. Dist. LEXIS 130621 (N.D. Cal. Sep. 16, 2014)	24
7	<i>El Aguila Food Prod., Inc. v. Gruma Corp.,</i>	
8	131 F. App'x 450 (5th Cir. 2005)	57
9	<i>Eleven Line, Inc. v. N. Tex. State Soccer Ass'n, Inc.,</i>	
10	213 F.3d 198 (5th Cir. 2000)	57, 58, 59
11	<i>Ellis v. Costco Wholesale Corp.,</i>	
12	657 F.3d 970 (9th Cir. 2011)	9
13	<i>Everett Fin., Inc. v. Primary Residential Mortg., Inc.,</i>	
14	No. 3:14-cv-1028, 2016 U.S. Dist. LEXIS 181517 (N.D. Tex. Dec. 19, 2016)	59
15	<i>Fed. Trade Comm'n v. Amazon.com, Inc.,</i>	
16	No. 14-cv-1038, 2016 WL 1221654 (W.D. Wash. Mar. 29, 2016)	16
17	<i>Fleischman v. Albany Med. Ctr.,</i>	
18	728 F. Supp. 2d 130 (N.D.N.Y. 2010)	35, 36
19	<i>Frye v. U.S.,</i>	
20	54 App. D.C. 46 (D.C. Cir. 1923)	16
21	<i>Gen. Elec. Co. v. Joiner,</i>	
22	522 U.S. 136 (1997)	20, 21, 52
23	<i>Geneva Pharm. Tech. Corp. v. Barr Labs. Inc.,</i>	
24	386 F.3d 485 (2d Cir. 2004)	37, 44
25	<i>Giuliano v. Sandisk Corp.,</i>	
26	No. 10-cv-02787, 2015 WL 10890654 (N.D. Cal. May 14, 2015)	39
27	<i>Golden Boy Promotions LLC v. Haymon,</i>	
28	No. 15-cv-3378, 2017 WL 460736 (C.D. Cal. Jan. 26, 2017)	47, 56
	<i>Grason Elec. Co. v. Sacramento Mun. Utility Dist.,</i>	
	571 F. Supp. 1504 (E.D. Cal. 1983)	44
	<i>Gray v. United States,</i>	
	No. 05-cv-1893, 2007 U.S. Dist. LEXIS 17937 (S.D. Cal. Mar. 12, 2007)	62

TABLE OF AUTHORITIES (cont.)

1	<i>Hangarter v. Provident Life and Acc. Ins. Co.</i> ,	
2	373 F.3d 998 (9th Cir. 2004)	38, 40
3	<i>Harris Wayside Furniture Co. v. Ideac Media Corp.</i> ,	
4	No. 06-cv-392, 2008 WL 7109357 (D.N.H. Dec. 22, 2008).....	57
5	<i>Hemmings v. Tidyman's, Inc.</i> ,	
6	285 F.3d 1174 (9th Cir. 2002)	24
7	<i>Hopkins v. Dow Corning Corp.</i> ,	
8	33 F.3d 1116 (9th Cir. 1994)	16
9	<i>Hynix Semiconductor Inc. v. Rambus, Inc.</i> ,	
10	Nos. 00-cv-20905, 05-cv-00334, 05-cv-00298, 06-cv-00244, 2008 WL 73689 (N.D. Cal. Jan. 5, 2008)	41
11	<i>Image Tech. Servs. v. Eastman Kodak Co.</i> ,	
12	125 F.3d 1195 (9th Cir. 1997)	passim
13	<i>In re Asacol Antitrust Litig.</i> ,	
14	No. 15-cv-12730, 2017 WL 5196381 (D. Mass. Nov. 9, 2007).....	32
15	<i>In re Blood Reagent Antitrust Litig.</i> ,	
16	No. 09-2081, 2015 WL 6123211 (E.D. Pa. Oct. 19, 2015).....	35, 39
17	<i>In re Cathode Ray Tube Antitrust Litig.</i> ,	
18	No. 07-cv-5944, 2013 WL 5391159 (N.D. Cal. Sept. 24, 2013)	22
19	<i>In re Cox Enterprises, Inc. Set-Top Cable Television Box Antitrust Litig.</i> ,	
20	No. 09-ML-2048-C, 2011 WL 6826813 (W.D. Okla. Dec. 28, 2011)	4, 35
21	<i>In re Delta/Airtran Baggage Fee Antitrust Litig.</i> ,	
22	245 F. Supp. 3d 1343 (N.D. Ga. 2017)	4
23	<i>In re Delta/AirTran Baggage Fee Antitrust Litig.</i> ,	
24	317 F.R.D. 675 (N.D. Ga. 2016)	3, 4
25	<i>In re Dewey Ranch Hockey, LLC</i> ,	
26	414 B.R. 577 (Bankr. D. Ariz. 2009)	6
27	<i>In re Dynamic Random Access Memory Antitrust Litig.</i> ,	
28	No. 02-cv-1486, 2006 WL 1530166 (N.D. Cal. June 5, 2006)	56
	<i>In re Egg Products Antitrust Litig.</i> ,	
	81 F. Supp. 3d 412 (E.D. Pa. 2015).....	25, 26, 27

TABLE OF AUTHORITIES (cont.)

1	<i>In re Fla. Cement & Concrete Antitrust Litig.</i> ,	
2	278 F.R.D. 674 (S.D. Fla. 2012)	4, 29
3	<i>In re High-Tech Emp. Antitrust Litig.</i> ,	
4	856 F. Supp. 2d 1103 (N.D. Cal. 2012).....	13, 38
5	<i>In re High-Tech Emp. Antitrust Litig.</i> ,	
6	289 F.R.D. 555 (N.D. Cal. 2013)	15
7	<i>In re High-Tech Emp. Antitrust Litig.</i> ,	
8	985 F. Supp. 2d 1167 (N.D. Cal. 2013).....	24
9	<i>In re High-Tech Emp. Antitrust Litig.</i> ,	
10	No. 11-cv-02509, 2014 U.S. Dist. LEXIS 47181 (N.D. Cal. Apr. 4, 2014).....	9
11	<i>In re Imperial Credit Indus. Sec. Litig.</i> ,	
12	252 F. Supp. 2d 1005 (C.D. Cal. 2003).....	62
13	<i>In re Lidoderm Antitrust Litig.</i> ,	
14	No. 14-md-02521, 2017 WL 679367 (N.D. Cal. Feb. 21, 2017)	passim
15	<i>In re Live Concert Antitrust Litig.</i> ,	
16	247 F.R.D. 98 (C.D. Cal. 2007)	51
17	<i>In re Live Concert Antitrust Litig.</i> ,	
18	863 F. Supp. 2d 966 (C.D. Cal. 2012).....	46, 56
19	<i>In re Live Concert Antitrust Litig.</i> ,	
20	No. 06-ml-01745, 2011 WL 13136259 (C.D. Cal. Jan. 4, 2011)	59
21	<i>In re Microsoft Corp. Antitrust Litig.</i> ,	
22	699 F. Supp. 2d 730 (D. Md. 2010)	32
23	<i>In re Mushroom Direct Purchaser Antitrust Litig.</i> ,	
24	No. 06-cv-0620, 2015 WL 5767415 (E.D. Pa. July 29, 2015).....	35
25	<i>In re Nexium (Esomeprazole) Antitrust Litig.</i> ,	
26	297 F.R.D. 168 (D. Mass. 2013)	59
27	<i>In re Online DVD Rental Antitrust Litig.</i> ,	
28	No. 09-2029, 2011 WL 5883772 (N.D. Cal. Nov. 23, 2011)	34, 53, 60
	<i>In re Pharmacy Benefit Managers Antitrust Litig.</i> ,	
	Nos. 06-1782, 03-4730, 06-4305, 06-4114, 06-4115, 2017 WL 275398 (E.D. Pa. Jan. 18, 2017)	33
	<i>In re Photochromic Len Antitrust Litig.</i> ,	
	No. 8:10-md-2173, 2013 WL 8183461 (M.D. Fla. Mar. 12, 2013)	22, 23
	<i>In re Photochromic Lens Antitrust Litig.</i> ,	
	No. 8:10-md-2173, 2014 WL 1338605 (M.D. Fla. Apr. 3, 2014).....	4, 22

TABLE OF AUTHORITIES (cont.)

1	<i>In re Rail Freight Fuel Surcharge Antitrust Litig.</i> ,	
2	No. 07-0489, 2017 WL 5311533 (D.D.C. Nov. 13, 2017).....	33, 60
3	<i>In re Rezulin Products Liability Litigation</i> ,	
4	309 F. Supp. 2d 531 (S.D.N.Y. 2004)	39
5	<i>In re Rubber Chems. Antitrust Litig.</i> ,	
6	232 F.R.D. 346 (N.D. Cal. 2005)	51
7	<i>In re Silicone Gel Breast Implants Prod. Liab. Litig.</i> ,	
8	318 F. Supp. 2d 879 (C.D. Cal. 2004).....	52
9	<i>Indeck Energy Servs., Inc. v. Consumers Energy Co.</i> ,	
10	250 F.3d 972 (6th Cir. 2000)	28
11	<i>Intrade Indus., Inc. v. Foreign Cargo Mgmt. Corp.</i> ,	
12	No. 1:07-cv-1893, 2008 WL 5397495 (E.D. Cal. 2008).....	30
13	<i>Int'l Boxing Club, Inc. v. United States</i> ,	
14	358 U.S. 242 (1959).....	41
15	<i>J. Truett Payne Co., Inc. v. Chrysler Motors Corp.</i> ,	
16	451 U.S. 557 (1981).....	31
17	<i>Jarrett v. Insight Commc'ns Co., L.P.</i> ,	
18	No. 3:09-cv-00093, 2014 WL 3735193 (W.D. Ky. Jul. 29, 2014).....	4, 40
19	<i>Johnson v. Ariz. Hosp. and Healthcare Ass'n</i> ,	
20	No. 07-cv-1292, 2009 WL 5031334 (D. Ariz. July 14, 2009)	3, 4, 15, 18
21	<i>Jordan v. Dominick's Finer Foods</i> ,	
22	115 F. Supp. 3d 950 (N.D. Ill. 2015).....	5
23	<i>Kamakahi v. Am. Soc. For Reproductive Med.</i> ,	
24	305 F.R.D. 164 (N.D. Cal. 2015)	4, 41
25	<i>Kentucky Speedway, LLC v. Nat'l Assoc. of Stock Car Auto Racing, Inc.</i> ,	
26	588 F.3d 908 (6th Cir. 2009)	6, 47
27	<i>King Drug Co. of Florence, Inc. v. Cephalon, Inc.</i> ,	
28	Nos. 2:06-cv-1797, 2:06-cv-1833, 2:06-cv-2768, 2015 WL 12645766 (E.D. Pa. Dec. 22, 2015)	4, 28
	<i>LePage's, Inc. v. 3M</i> ,	
	324 F.3d 141 (3d Cir. 2002)	32
	<i>Little Rock Cardiology Clinic PA v. Baptist Health</i> ,	
	591 F.3d 591 (8th Cir. 2009).....	44

TABLE OF AUTHORITIES (cont.)

1	<i>Loeffel Steel Prods., Inc. v. Delta Brands, Inc.,</i>	
2	387 F. Supp. 2d 794 (N.D. Ill. 2005).....	57
3	<i>Mazda v. Carfax, Inc.,</i>	
4	No. 13-cv-2680, 2016 WL 7231941 (S.D.N.Y. Dec. 9, 2016).....	passim
5	<i>Meijer, Inc. v. Abbott Laboratories, Inc.</i>	
6	No. 07-cv-5985, 2008 WL 4065839 (N.D. Cal. Aug. 27, 2008).....	4
7	<i>Memdata, LLC v. Intermountain Healthcare, Inc.,</i>	
8	No. 2:08-cv-190, 2010 WL 1779956 (D. Utah Apr. 29, 2010)	4
9	<i>Messick v. Novartis Pharm. Corp.,</i>	
10	747 F.3d 1193 (9th Cir. 2014)	9
11	<i>Missouri Hosp. v. C.R. Bard, Inc.,</i>	
12	No. 1:07-cv-0031, 2008 WL 4372741 (E.D. Mo. Sept. 22, 2008).....	3, 4
13	<i>Morgan, Strand, Wheeler & Biggs v. Radiology, Ltd.,</i>	
14	924 F.2d 1484 (9th Cir. 1991)	37
15	<i>Muffett v. City of Yakima,</i>	
16	No. 10-cv-3092, 2012 WL 12827492 (E.D. Wash. July 20, 2012)	51, 57
17	<i>Murphy Tugboat Co. v. Crowley,</i>	
18	658 F.2d 1256 (9th Cir. 1981)	34, 39, 60
19	<i>Natchitoches Parish Hosp. Serv. Dist. v. Tyco Intern., Ltd.,</i>	
20	262 F.R.D. 58 (D. Mass. 2008)	4
21	<i>Omni Healthcare Inc. v. Health First, Inc.,</i>	
22	No. 6:13-cv-1509, 2016 WL 4272164 (M.D. Fla. Aug. 13, 2016)	4
23	<i>Oracle Am., Inc. v. Google Inc.,</i>	
24	No. 10-cv-03561, 2012 WL 850705 (N.D. Cal. Mar. 13, 2012)	17
25	<i>Ortega v. Nat. Balance Inc.,</i>	
26	No. 13-cv-05942, 2014 WL 12560623 (C.D. Cal. Oct. 29, 2014)	20
27	<i>Paladin Assocs. v. Montana Power Co.,</i>	
28	328 F.3d 1145 (9th Cir. 2003)	41, 43
	<i>PepsiCo, Inc. v. Coca-Cola Co.,</i>	
	315 F.3d 101 (2d Cir. 2002)	37
	<i>Primiano v. Cook,</i>	
	598 F.3d 558 (9th Cir. 2010)	9, 16
	<i>Procaps S.A. v. Patheon Inc.,</i>	
	141 F. Supp. 3d 1246 (S.D. Fla. 2015).....	40

TABLE OF AUTHORITIES (cont.)

1	<i>Pro Search Plus, LLC v. VFM Leonardo, Inc.</i> ,	
2	No. 12-cv-2102, 2013 U.S. Dist. LEXIS 169856 (C.D. Cal. Dec. 2, 2013)	28
3	<i>R&R Int'l, Inc. v. Manzen, LLC</i> ,	
4	No. 09-60545, 2010 U.S. Dist. LEXIS 94550 (S.D. Fla. Sep. 12, 2010)	54
5	<i>Rebel Oil Co. Inc. v. Atl. Richfield Co.</i> ,	
6	51 F.3d 1421 (9th Cir. 1995)	passim
7	<i>Reed v. Advocate Health Care</i> ,	
8	268 F.R.D. 573 (N.D. Ill. 2009)	15
9	<i>Rogers v. United States</i> ,	
10	281 F.3d 1108 (10th Cir. 2002)	5
11	<i>Safeway Inc. v. Abbott Laboratories, Inc.</i>	
12	761 F. Supp. 2d 874 (N.D. Cal. 2011).....	4
13	<i>Scott v. Ross</i> ,	
14	140 F.3d 1275 (9th Cir. 1998)	62
15	<i>Sebastian Int'l, Inc. v. Russolillo</i> ,	
16	No. 00-cv-3476, 2005 WL 1323127 (C.D. Cal. Feb. 22, 2005).....	61
17	<i>SMS Systems Maintenance Servs. Inc. v. Digital Equip. Corp.</i> ,	
18	188 F.3d 11 (1st Cir. 1999).....	49, 50
19	<i>Spanish Broad. Sys. of Fla., Inc. v. Clear Channel Commc'ns, Inc.</i> ,	
20	376 F.3d 1065 (11th Cir. 2004)	40
21	<i>Spinelli v. Nat'l Football League</i> ,	
22	96 F. Supp. 3d 81 (S.D.N.Y. 2015)	28
23	<i>Stecyk v. Bell Helicopter Textron, Inc.</i> ,	
24	295 F.3d 408 (3d Cir. 2002)	22
25	<i>Tampa Elec. Co. v. Nashville Coal Co.</i> ,	
26	365 U.S. 320 (1961)	28
27	<i>Tawfilis v. Allergan, Inc.</i> ,	
28	No. 8:15-cv-00307, 2017 WL 3084275 (C.D. Cal. June 26, 2017)	51, 54, 61
	<i>Theme Promotions, Inc. v. News Am. Mktg. FSI</i> ,	
	546 F.3d 991 (9th Cir. 2008)	13, 14
	<i>Thermotek, Inc. v. Orthoflex, Inc.</i> ,	
	No. 8:15-cv-00307, 2016 WL 4678888 (N.D. Tex. Sept. 7, 2016).....	57
	<i>Todd v. Exxon Corp.</i> ,	
	275 F.3d 191 (2d Cir. 2001)	41

TABLE OF AUTHORITIES (cont.)

1	<i>Tokio Marine & Fire Ins. Co. v. Norfolk & W. Ry. Co.</i> ,	
2	Nos. 98-1050, 98-1077, 1999 WL 12931 (4th Cir. Jan. 14, 1999).....	62, 63
3	<i>Trailer Sales of Kansas City, Inc. v. MAC Trailer Mfg., Inc.</i> ,	
4	267 F.R.D. 368 (D. Kan. 2010).....	17
5	<i>Twin City Sportserv., Inc. v. Charles O. Finley & Co.</i> ,	
6	676 F.2d 1291 (9th Cir. 1982).....	7, 13, 28, 41
7	<i>U.S. Healthcare, Inc. v. Healthsource, Inc.</i> ,	
8	986 F.2d 589 (1st Cir. 1993).....	47, 48
9	<i>U.S. v. Microsoft Corp.</i> ,	
10	253 F.3d 34 (D.C. Cir. 2001).....	32, 33
11	<i>United States v. Riley</i> ,	
12	No. 2:12-cr-00478, 2014 WL 537013 (D. Nev. Feb. 7, 2014).....	10
13	<i>United States v. Aetna, Inc.</i> ,	
14	No. 3-99 CV 1398-H, 1999 WL 1419046 (N.D. Tex. Dec. 7, 1999).....	43
15	<i>United States v. Bazaarvoice, Inc.</i> ,	
16	No. 13-cv-00133, 2014 WL 203966 (N.D. Cal. Jan. 8, 2014).....	46
17	<i>United States v. Brown</i> ,	
18	299 F.3d 1252 (11th Cir. 2002).....	62
19	<i>United States v. Celgene Corp.</i> ,	
20	226 F. Supp. 3d 1032 (C.D. Cal. 2016).....	39
21	<i>United States v. Grinnell Corp.</i> ,	
22	384 U.S. 563 (1966).....	37, 41
23	<i>United States v. Oracle Corp.</i> ,	
24	331 F. Supp. 2d 1098 (N.D. Cal. 2004).....	45, 46
25	<i>United States v. Rice Growers Association of California</i> ,	
26	No. S-84-1066, 1986 WL 12562 (E.D. Cal. Jan. 31, 1986).....	49
27	<i>United States v. Sony Corp. of Am.</i> ,	
28	No. 98-cv-2716, 1998 WL 1542829 (S.D.N.Y. May 6, 1998).....	43
	<i>United States v. Syufy Ents.</i> ,	
	903 F.2d 659 (9th Cir. 1990).....	49
	<i>United States v. W.R. Grace</i> ,	
	455 F. Supp. 2d 1203 (D. Mont. 2006).....	17
	<i>Universal Surveillance Corp. v. Checkpoint Sys., Inc.</i> ,	
	No. 5:11-cv-1755, 2015 WL 6082122 (N.D. Ohio Sept. 30, 2015).....	42, 43

TABLE OF AUTHORITIES (cont.)

1	<i>Virgin Valley Water Dist. v. Vanguard Piping Sys. (Canada), Inc.</i> ,	
2	No. 2:09-cv-00309, 2011 WL 117259 (D. Nev. Jan. 13, 2011)	10, 20
3	<i>Waymo LLC v. Uber Techs., Inc.</i> ,	
4	No. 17-cv-00939, 2017 WL 5148390 (N.D. Cal. Nov. 6, 2017)	36
5	<i>Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., Inc.</i> ,	
6	549 U.S. 312 (2007)	37
7	<i>Williamson Oil Co. v. Philip Morris USA</i> ,	
8	346 F.3d 1287 (11th Cir. 2003)	60
9	<i>Woman's Clinic, Inc. v. St. John's Health Sys., Inc.</i> ,	
10	252 F. Supp. 2d 857 (W.D. Mo. 2002)	28
11	<i>Zenith Elecs. Cor. v. WH-TV Broad. Corp.</i> ,	
12	395 F.3d 416 (7th Cir. 2005)	44
13	<i>Zenith Radio Corp. v. Hazeltine Research, Inc.</i> ,	
14	395 U.S. 100 (1969)	32
15	<i>ZF Meritor, LLC v. Eaton Corp.</i> ,	
16	696 F.3d 254 (3d Cir. 2012)	22, 28

STATUTES

16	Muhammad Ali Boxing Reform Act,	
17	106 Enacted H.R. 1832, 114 Stat. 321, §10(a)(1)(B)	55

RULES

19	Fed. R. Evid. 702	9, 16, 22
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GLOSSARY OF ABBREVIATIONS

For the convenience of the Court and efficiency, Plaintiffs' Consolidated Brief in Opposition to Zuffa, LLC's Motion to Exclude the Testimony of Drs. Hal Singer and Andrew Zimbalist (ECF Nos. 522, 524) uses the following abbreviations for citations to the parties' filings and expert reports:

Declaration of Eric L. Cramer, Esq. (February 16, 2018)	CD	ECF No. 518-1
Declaration of Eric L. Cramer, Esq. (April 6, 2018)	CD2	Filed contemporaneously
Plaintiffs' Motion for Class Certification (February 16, 2018)	Class Mot.	ECF No. 518
Zuffa, LLC's Motion to Exclude the Testimony of Dr. Hal Singer Under Fed. R. Evid. 702 and <i>Daubert</i> (February 16, 2018)	SD	ECF No. 524
Zuffa, LLC's Motion to Exclude the Testimony of Dr. Andrew Zimbalist Under Fed. R. Evid. 702 and <i>Daubert</i> (February 16, 2018)	ZD	ECF No. 522
Expert Report of Hal J. Singer, Ph.D. (August 31, 2017)	SR1	ECF No. 518-3
Rebuttal Expert Report of Hal J. Singer, Ph.D. (January 12, 2018)	SR2	ECF No. 518-4
Supplemental Expert Report of Hal J. Singer, Ph.D. (April 3, 2018)	SR3	CD2, Exhibit 49
Expert Report of Andrew Zimbalist in <i>Cung Le, et al. v. Zuffa, LLC</i> (August 30, 2017)	ZR1	ECF No. 518-5
Expert Rebuttal Report of Andrew Zimbalist (December 26, 2017)	ZR2	ECF No. 518-6
Expert Rebuttal Report of Professor Alan Manning (January 12, 2018)	MR1	ECF No. 518-7
Expert Report of Professor Robert H. Topel (October 27, 2017)	TR1	ECF Nos. 528, 524-5
Expert Report of Paul Oyer (October 27, 2017)	OR1	ECF No. 524-10
Expert Report of Roger D. Blair (November 15, 2017)	BR1	ECF No. 522-10

ROADMAP TO PLAINTIFFS' RESPONSES TO DEFENDANT'S ARGUMENTS

For the convenience of the Court and efficiency, Plaintiffs provide the following table to cross reference Defendant's arguments as set out by section in each brief with corresponding responses by Plaintiffs herein, with the caveat that because many points overlap, multiple sections of Plaintiffs' brief may address certain of Defendant's arguments.

Defendant's Argument Sections	Plaintiffs' Responsive Sections
SD I.A.1	Daubert Opp. V.A.1-3
SD I.A.2	Daubert Opp. V.A.4
SD I.B	Daubert Opp. V.B
SD I.C	Daubert Opp. V.C
SD II.A.1	Daubert Opp. V.D.1
SD II.A.2	Daubert Opp. V.D.2
SD II.B	Daubert Opp. V.E
SD II.C	Daubert Opp. V.F
SD III.A	Daubert Opp. V.G.4.a
SD III.B	Daubert Opp. V.G.4.a
SD III.C	Daubert Opp. V.G.4.b
SD IV	Daubert Opp. V.G.5
SD V.A	Daubert Opp. V.G.2
SD V.B	Daubert Opp. V.G.2
SD V.C	Daubert Opp. V.G.2
ZD I.A	Daubert Opp. VI.A-B
ZD I.B	Daubert Opp. VI.B-C
ZD I.C	Daubert Opp. VI.B
ZD I.D	Daubert Opp. VI.B-C
ZD I.E	Daubert Opp. VI.D
ZD I.F	Daubert Opp. VI.E
ZD II	Daubert Opp. VI
ZD III	Daubert Opp. VI.F

I. INTRODUCTION AND SUMMARY OF ARGUMENT

Plaintiffs have proffered testimony from three highly respected economic experts: Drs. Alan Manning, Hal Singer, and Andrew Zimbalist. Zuffa concedes their qualifications, as well as the admissibility of Dr. Manning’s testimony. Zuffa also concedes the admissibility of Dr. Zimbalist’s opinions on anticompetitive effects and the absence of procompetitive justifications, challenging only his calculation of damages. Zuffa separately challenges several of Dr. Singer’s opinions. None of Zuffa’s attacks on Drs. Singer or Zimbalist has any merit. They are largely based on inadmissible attorney speculation and, at most, speak to persuasiveness, not admissibility.

The closest Zuffa comes to an appropriate *Daubert* issue involves a dispute about *how* to assess whether Zuffa’s scheme (the “Scheme”)¹ suppressed compensation to its fighters (“Fighters”). Plaintiffs’ experts use wage share (“Wage Share”), measuring compensation as a percentage of revenue. Zuffa’s three economists, in contrast, insist that the *only* acceptable approach is to use *wage level*, measuring compensation in dollars. If Zuffa were right on this issue, its *Daubert* motions might have been plausible.

On the other hand, if Zuffa is wrong, then Plaintiffs’ economic expert testimony is sound and, indeed, devastating to Zuffa. After all, Zuffa has paid its Fighters [REDACTED] or less of its revenues from MMA events (“Event Revenues”). In contrast, [REDACTED]
[REDACTED]
[REDACTED]. Moreover, Dr. Singer performs regression analyses to assess the effects of Zuffa’s long-term, exclusive Fighter contracts that have restricted Fighter mobility and blocked potential competitors from access to a key input—a deep pool of top-quality athletes. His “impact regressions” show that as the portion of the market subject to Zuffa’s contracts (its “Foreclosure Share”) went up, the Fighter Wage Share fell, *impacting* all or nearly all Class members by suppressing their compensation. The impact regressions establish that: (1) Zuffa had the market power to foreclose competition and impose anticompetitive effects; (2) its illegal Scheme did substantially foreclose competition and cause anticompetitive effects; (3) the Scheme

¹See Class Mot. at 1, 8-11 (describing the elements of the Scheme).

caused antitrust injury to all or nearly all Class members; and (4) damages are quantifiable on a classwide basis. Those showings strongly support the elements of Plaintiffs' claim on the merits and class certification. *See* Class Mot. at 21-30.

What is most striking about Zuffa's *Daubert* motions is that Zuffa largely abandons its original position on Wage Share. And for good reason. Zuffa's economists had all taken a categorical stance against Wage Share, with Dr. Paul Oyer's report dedicated to a single point: use of Wage Share is never appropriate. OR1 ¶5. Central to his opinion was his reliance on a scholarly book: ALAN MANNING, *MONOPSONY IN MOTION: IMPERFECT COMPETITION IN LABOR MARKETS* (2003).² Dr. Oyer proclaimed that Dr. Manning is "a recognized expert and leader . . . in analysis of monopsony in labor markets" who is "particularly authoritative."³ Dr. Oyer observed that Dr. Manning did not discuss Wage Share in *MONOPSONY IN MOTION* and opined that must mean that Dr. Manning rejects it. *See* OR1 ¶¶22-27.

But Zuffa's original position on Wage Share has unraveled. When confronted with publication after publication assessing compensation to professional athletes in terms of Wage Share, Dr. Oyer admitted: he had never read them, CD2, Ex. 55 (Oyer Dep.) at 102:22-119:4; his report did not acknowledge them, *id.*; they in fact used Wage Share, *id.*; and he knew of no publication *anywhere* rejecting Wage Share. *Id.* at 123:7-124:9. Further, Plaintiffs obtained a rebuttal report from Dr. Manning himself explaining that use of Wage Share *is appropriate in this case*. MR1 ¶¶5-31. In particular, Dr. Manning notes that professional athletes—unlike many other workers—are often responsible for a percentage of the revenues generated at athletic events. Fans pay to see particular Fighters compete, whereas people generally do not, for example, buy Microsoft Word because of the identity of any of the engineers who worked on it. So whereas Wage Share may not be appropriate for analyzing the effects of monopsony power on some workers, assessing the relative competitiveness of MMA Fighter compensation, like that of many other professional athletes, is best done using Wage Share. *Id.* As a result, Zuffa cannot show—as it must under *Daubert*—that using Wage Share is *junk*

² *See* OR1 ¶¶22-26.

³ CD2, Ex. 55 (Oyer Dep.) at 123:4-6; *see also id.* at 122:17-21 (admitting "Alan Manning is a recognized expert and leader in the thinking of monopsony—analysis of monopsony in labor markets").

1 *economics*. Indeed, Zuffa now *concedes* that “wage share is often referenced, particularly in ‘sports
2 economics,’” and that use of Wage Share is proper when economists “attempt to analyze the impact of
3 an observed **change** in monopsony power,” just as Plaintiffs’ experts do here. SD at 2, 15. So Zuffa is
4 limited to a scattershot of much narrower—though similarly improper—arguments. As Plaintiffs show
5 below, none has merit.

6 **II. DRS. SINGER AND ZIMBALIST HAVE EXCELLENT CREDENTIALS**

7 **Dr. Hal Singer**. Zuffa peppers its brief with *ad hominem* attacks on Dr. Singer, grossly
8 distorting his background and record. He has M.A. and Ph.D. degrees in economics from Johns
9 Hopkins University, is a senior fellow at the George Washington University’s Institute for Public
10 Policy, and serves an adjunct professor at Georgetown’s McDonough School of Business. SR1 ¶¶8, 13.
11 His economic scholarship and testimony have been widely cited by courts and regulatory agencies,
12 including the FTC, the FCC, and the DOJ. *Id.* ¶11. Dr. Singer’s expertise spans several industries,
13 including sports. *Id.* ¶12. He has served as an expert for several cable sports networks before the FCC,
14 and for the Baltimore Orioles in their revenue dispute with the Washington Nationals, arbitrated by
15 Major League Baseball. *Id.*

16 Courts have widely cited Dr. Singer in antitrust matters. Since 2008 six separate district courts
17 have relied on his economic analyses in certifying classes in antitrust cases. *See In re Lidoderm*
18 *Antitrust Litig.*, 2017 WL 679367, at *21, 23 (N.D. Cal. Feb. 21, 2017) (“A rigorous review of Singer’s
19 . . . opinions and their reasoning, as required under recent Supreme Court precedent, establishes that the
20 concepts and designs of their models are solid.”); *In re Delta/AirTran Baggage Fee Antitrust Litig.*, 317
21 F.R.D. 675, 689 (N.D. Ga. 2016) (finding Dr. Singer “well-qualified,” and concluding: “After extensive
22 review of the balance of Singer’s [damages] opinions, . . . the Court concludes they are admissible
23 because Singer’s methods are reliable and his opinions are relevant and likely to assist the trier of
24 fact”); *Johnson v. Ariz. Hosp. and Healthcare Ass’n*, 2009 WL 5031334, at *10-11 (D. Ariz. July 14,
25 2009) (“the results [of Dr. Singer’s regression analysis] are persuasive and seem to show a clear
26 depression of wages”); *Se. Missouri Hosp. v. C.R. Bard, Inc.*, 2008 WL 4372741, at *6-8 (E.D. Mo.
27 Sept. 22, 2008) (plaintiffs “will be able to use the formulaic approach advanced by Dr. Singer to
28

calculate damages”); *Natchitoches Parish Hosp. Serv. Dist. v. Tyco Intern., Ltd.*, 262 F.R.D. 58, 70 (D. Mass. Aug. 29, 2008) (Dr. Singer “posited a viable theory” that was “based on standard antitrust methodology”); *Meijer, Inc. v. Abbott Laboratories, Inc.*, 2008 WL 4065839, at *9-10 (N.D. Cal. Aug. 27, 2008) (“Dr. Singer’s conclusion . . . is eminently plausible.”). Courts have widely admitted and relied on his opinions relating to market power and relevant market,⁴ anticompetitive conduct and effects,⁵ and antitrust impact and damages.⁶

Notwithstanding Zuffa’s claims to the contrary, SD at 3, 18, n.10, 21, 22, 26, 27, 32, 36, 38, just two courts have excluded only small portions of his opinions: *Cephalon*, SD at 22,⁷ and *Kamakahi v. Am. Soc. For Reproductive Med.*, 305 F.R.D. 164 (N.D. Cal. 2015), SD at 38.⁸ In every other case Zuffa cites, Dr. Singer’s testimony was *admitted* in full.⁹ Dozens of courts have relied on his testimony.

⁴ *Apotex, Inc. v. Cephalon, Inc.*, 321 F.R.D. 220, 232-34 (E.D. Pa. 2017); *Lidoderm*, 2017 WL 679367, at *28; *In re Baggage Fee*, 317 F.R.D. at 689; *Safeway Inc. v. Abbott Laboratories, Inc.*, 761 F. Supp. 2d 874, 888-89 (N.D. Cal. 2011).

⁵ *In re Delta/Airtran Baggage Fee Antitrust Litig.*, 245 F. Supp. 3d 1343, 1359-60 (N.D. Ga. 2017); *Authenticom, Inc. v. CDK Global, LLC*, 2017 WL 3017048, at *6 (W.D. Wisc. July 14, 2017); *Safeway*, 761 F. Supp. 2d at 891; *King Drug Co. of Florence, Inc. v. Cephalon, Inc.* (“*Cephalon*”), 2015 WL 12645766, at *5 (E.D. Pa. Dec. 22, 2015); *Memdata, LLC v. Intermountain Healthcare, Inc.*, 2010 WL 1779956, at *3, 5 (D. Utah Apr. 29, 2010).

⁶ *Lidoderm*, 2017 WL 679367, at *19; *Apotex*, 321 F.R.D. at 227; *Omni Healthcare Inc. v. Health First, Inc.*, 2016 WL 4272164, at *9, 30 (M.D. Fla. Aug. 13, 2016); *Johnson*, 2009 WL 5031334, at *11; *Se. Missouri Hosp.*, 2008 WL 4372741, at *6-8; *Natchitoches Parish Hosp. Serv. Dist.*, 262 F.R.D. at 69-70; *Meijer*, 2008 WL 4065839, at *9-10.

⁷ *See also Apotex*, SD at 21, which is a later decision in the same case. In *Cephalon*, out of hundreds of pages Dr. Singer submitted, the court excluded a minor snippet of testimony setting out “Defendants’ knowledge, intent, or state of mind,” and one paragraph setting out the legal standard. *Cephalon*, 2015 WL 12645766, at *5-6. A later opinion excluded two minor, alternative damages analyses, which did not flow from his model, but instead were “prepared at the request of counsel.” *Apotex*, 321 F.R.D. at 227, 235. The court admitted the vast majority of Dr. Singer’s testimony and modeling. *Id.* at 232-34.

⁸ In *Kamakahi*, the court did not admit Dr. Singer’s damages model solely because the limited data he had available were insufficient to extrapolate to the class. 305 F.R.D. at 179, 181.

⁹ *See In re Cox Enterprises, Inc. Set-Top Cable Television Box Antitrust Litig.*, 2011 WL 6826813 (W.D. Okla. Dec. 28, 2011), SD at 3, 27 (**nothing excluded**; court unpersuaded regarding common impact because of regional variation); *In re Fla. Cement & Concrete Antitrust Litig.*, 278 F.R.D. 674 (S.D. Fla. 2012), SD at 22 (**nothing excluded**; court disagreed with Dr. Singer’s “pass through” analysis in indirect purchaser case); *In re Photochromic Lens Antitrust Litig.*, 2014 WL 1338605 (M.D. Fla. Apr. 3, 2014), SD at 18, n.10 (**nothing excluded**; court unpersuaded because of data deficiencies); *Jarrett v. Insight Commc’ns Co., L.P.*, 2014 WL 3735193 (W.D. Ky. Jul. 29, 2014), SD at 36 (**nothing excluded**; court disagreed at summary judgment with sufficiency of evidentiary basis for opinion); *Mazda v.*

1 See, e.g., SR1, Appx. 1 at pp. 191-94 (listing 36 cases *just* since 2012).

2 **Dr. Andrew Zimbalist**. Dr. Zimbalist is one of the nation's leading sports economists. He is
3 chair of the Economics Department at Smith College. ZR1 ¶9. He has studied and consulted
4 extensively within the intercollegiate and professional sports industry for leagues, teams, players'
5 associations, governments, citizen groups, and athletes for over twenty-five years. *Id.* He has published
6 twenty-six books and dozens of articles, including on sports economics. ZR1, Appx. A. He is a co-
7 founder and serves on the editorial board of the *Journal of Sports Economics*. ZR1 ¶9. He recently
8 received the Henry Chadwick award from the Society for American Baseball Research meant to honor
9 "baseball's great researchers."¹⁰ Even Zuffa's economist, Dr. Blair, recently sought Dr. Zimbalist's
10 expertise on revenue sharing in major league sports. See CD2, Ex. 83 (Mar. 2, 2018 email from Roger
11 D. Blair to Andrew Zimbalist).

12 Numerous courts have admitted Dr. Zimbalist's testimony on economic matters, including
13 computation of damages. *E.g.*, *Jordan v. Dominick's Finer Foods*, 115 F. Supp. 3d 950, 963 (N.D. Ill.
14 2015) (denying motion to exclude damages testimony; finding it "reliable"); *City of Seattle v. Prof'l*
15 *Basketball Club LLC*, 2:07-cv-1620, ECF No. 117 (W.D. Wash. Jun. 17, 2008) (admitting testimony on
16 valuation of professional basketball team); *Hamilton Cnty. Bd. of Commissioners v. Nat'l Football*
17 *League*, 1:03-cv-355, ECF No. 145 (S.D. Ohio. May 25, 2005) (admitting liability testimony);
18 *Deutscher Tennis Bund v. ATP Tour Inc.*, 2003 WL 25832906, at *1 (D. Del. Sept. 26, 2003) (admitting
19 testimony on relevant market and market share in antitrust case involving professional tennis); *Rogers*
20 *v. United States*, 281 F.3d 1108, 1130 n.16 (10th Cir. 2002) (affirming district court's admission of Dr.
21 Zimbalist's testimony).¹¹ Zuffa points to only one case in which a court excluded his testimony.

22
23 *Carfax, Inc.*, 2016 WL 7231941 (S.D.N.Y. Dec. 9, 2016), SD at 3, 22 (***nothing excluded***; court
disagreed at summary judgment with evidentiary basis for one of his four opinions).

24 ¹⁰ See CD2, Ex. 81 (Dusty Christensen, *One of 'baseball's great researchers': Smith professor fields*
lifetime achievement award, DAILY HAMPSHIRE GAZETTE (Mar. 8, 2018),
25 <http://www.gazettenet.com/smith-college-economist-wins-baseball-research-award-16052832>).

26 ¹¹ See also *Fraser v. Major League Soccer*, 1:97-cv-10342, ECF No. 435-6 (D. Mass. Nov. 13-14,
2000) (admitting testimony in monopsony case); *Rogers v. United States*, No. 2:97-cv-2666, ECF No.
27 131 (D. Kan. May 21, 1999) (admitting testimony regarding valuation of major league baseball team);
28 *St. Louis Convention v. Nat'l Football League*, 4:95-cv-2443, ECF No. 225 (E.D. Miss. Oct. 30, 1997)

Kentucky Speedway, LLC v. National Association of Stock Car Auto Racing, Inc., 588 F.3d 908, 916 (6th Cir. 2009). ZD at 2, 8. In *Kentucky Speedway*, Dr. Zimbalist testified primarily on market definition, an issue he does not address here. 588 F.3d at 919.

III. SUMMARY OF THE OPINIONS OF DRS. SINGER AND ZIMBALIST

Drs. Singer and Zimbalist offer opinions supporting the elements of Plaintiffs' claim and class certification. Plaintiffs' case is based on Zuffa's Scheme to suppress Fighter pay. Central to the Scheme are Zuffa's long-term, exclusive contracts that foreclose other MMA promoters from the market, restrict MMA Fighter mobility, and deprive Fighters of competition for their services, thereby suppressing their pay. To prevail under Section 2 of the Sherman Act, Plaintiffs must show:

- (1) Market Power: Zuffa had substantial market power;
- (2) Substantial Foreclosure: Zuffa used its Scheme to acquire or maintain its market power by substantially foreclosing competition;
- (3) Anticompetitive Effects: the Scheme had *anticompetitive effects*; and
- (4) Causation of Damage: the Scheme *caused damage* to Plaintiffs in the form of suppressed compensation.¹²

Plaintiffs must also rebut any effort Zuffa makes to show the Scheme had *procompetitive effects* that outweigh its anticompetitive effects. In supporting class certification, Plaintiffs also offer common evidence of the Scheme violating the antitrust laws and causing widespread harm across Class members—*common impact*—and of the *aggregate damages* to the proposed classes. Class Mot. at 14-15, 21-30.

Market Power: Circumstantial and Direct Evidence (Dr. Singer). Market power—here, particularly monopsony power—is the ability to exclude rivals or suppress compensation below

(admitting damages testimony); *McNeil v. Nat'l Football League*, 4:90-cv-476, ECF No. 334 (D. Minn. Jun. 8, 1992) (admitting declaration on NFL franchise values); *In re Dewey Ranch Hockey, LLC*, 414 B.R. 577, 586 (Bankr. D. Ariz. 2009) (Prof. Zimbalist is “a long-time economics professor at Smith College in Massachusetts [who] has consulted extensively in the area of sports economics, has testified as an expert witness in sports-related litigation and before the U.S. Congress and other governmental bodies”).

¹² See Class Mot. at i, 1, 8-11 (defining proposed classes and describing the alleged Scheme).

competitive levels. Dr. Singer establishes monopsony power in two ways. First, he uses *direct evidence*, demonstrating that Zuffa *did* suppress compensation below competitive levels. *Rebel Oil Co. Inc. v. Atl. Richfield Co.*, 51 F.3d 1421, 1434 (9th Cir. 1995) (direct evidence showing firm is capable of exercising market power is sufficient). Second, Dr. Singer offers *circumstantial evidence*, defining a relevant market and showing Zuffa controlled a high share of it. A market share of 65% generally suffices. *Image Tech. Servs. v. Eastman Kodak Co.*, 125 F.3d 1195, 1206 (9th Cir. 1997). Dr. Singer shows that throughout the Class Period [REDACTED]. SR1 ¶129. Either form of evidence of monopsony power (direct or indirect) is sufficient by itself. *Rebel Oil*, 51 F.3d at 1434.

Given that this case is mainly about the suppression of Fighter compensation, the possession and exercise or maintenance of monopsony power is the focus of Dr. Singer's analysis. Nevertheless, Dr. Singer also similarly shows that Zuffa had monopoly power, *i.e.*, the power to raise prices to consumers above competitive levels or exclude competition for producing Live MMA Events. SR1 ¶¶130-31, 147-48; SR2 at I.A-I.C. Here, too, he used direct and indirect methods of proof. *Id.*

The Scheme Substantially Foreclosed Competition (Dr. Singer). Dr. Singer shows Zuffa imposed [REDACTED]. SR1 ¶¶64-91, 159-62; SR2 ¶¶53, 58, 61-62, 65, 67, 69. Courts have found foreclosure shares of 20 or 30% to be sufficiently substantial. *Twin City Sportserv., Inc. v Charles O. Finley & Co.*, 676 F.2d 1291, 1298 (9th Cir. 1982). Dr. Singer shows Zuffa's Foreclosure Share—the percentage of the market for the services of MMA Fighters subject to Zuffa's Exclusive Contracts—[REDACTED]. SR1 ¶¶168, 170, 173 & Figure 3.

Anticompetitive Effects (Dr. Singer; Dr. Zimbalist). Dr. Singer's impact regressions show that as Zuffa's Foreclosure Share rose, its Fighter Wage Share fell to [REDACTED] of Event Revenues, whereas in a competitive market its Fighter Wage Share would have been [REDACTED]. SR1 ¶¶186, 189-90. That is anticompetitive. Dr. Zimbalist confirms this result by reviewing the histories of the MLB, the NBA, the NFL, the NHL, and boxing, showing they had in the past used similar exclusive

contracts and explaining that, once they eased contract restrictions on mobility and allowed free agency, athlete pay rose to [REDACTED] of revenues. ZR1 ¶¶25-71; CD, Ex. 10 (Zimbalist Errata) at Table 4-E. Dr. Singer also shows the Scheme had additional anticompetitive effects, including reduced output and quality of MMA Events and inflated ticket and Pay-Per-View (“PPV”) prices for MMA Events to consumers. SR1 at III.D.4-5; SR2 at I.B.

Lack of Procompetitive Benefits (Dr. Singer; Dr. Zimbalist). Dr. Singer finds Zuffa provides no evidence that the Scheme had any procompetitive effects, such as by allegedly increasing investment in Fighters or MMA more generally. SR1 at VII; SR2 at V. Dr. Zimbalist confirms Dr. Singer’s findings, showing that the MLB, the NBA, the NFL, the NHL, and boxing had all once claimed their restrictive athlete contracts were essential to their success when in fact revenue, quality, and output all *improved* with expanded athlete mobility and free agency. ZR1 ¶¶79-80, 83-84, 89-103; ZR2 ¶¶9, 90, 97, 99-114. Athletes that get paid a competitive wage can devote more time and efforts to their training, health, promotion, and their sport in general. History has proven that higher athlete pay improves a sport dramatically. *See, e.g.*, ZR1 ¶¶79-80, 83-84; SR2 ¶¶ 197-98, 211, 234.

Causation, Fact of Damage, and Common Impact (Dr. Singer). Dr. Singer shows that as Zuffa increased the share of the market foreclosed by its exclusive contracts, it decreased its Fighter Wage Share, causing its Fighters to receive less compensation than they would have in a more competitive market. That showing establishes *causation* and *fact of damage*. He also uses common evidence in two ways to show that the impact was widespread across Class members, *i.e.*, *common impact*.¹³ First, his regression analyses enable him to compare the compensation *each Fighter* received to the compensation *that Fighter* would have received without the Scheme, demonstrating [REDACTED]. SR1 ¶¶230-31 & Table 8; CD, Ex. 9 (Singer Errata) at 4; SR2 ¶¶150-52 & Tables 2-3. Second, he uses documentary evidence and econometric analyses to show that Zuffa’s compensation to all of its Fighters was driven largely by common factors, and that pay to Fighters at all levels of the pay scale moved together over the relevant period. These analyses establish that if Zuffa had to raise pay to meet competition in the but-for world, all Fighters

¹³ *See* Class Mot. at 23-30 (discussion of Dr. Singer’s analysis of common impact).

1 would benefit, and thus that the Scheme suppressed the pay of all or nearly all Class members. Class
2 Mot. at 28.

3 **Aggregate Damages (Dr. Singer; Dr. Zimbalist).** Dr. Singer’s impact regressions show that,
4 absent Zuffa’s Scheme, the Bout Class would have received [REDACTED],
5 SR1 ¶252, and the Identity Class would have received [REDACTED]. SR1 ¶256. He
6 confirms damages to the Bout Class by comparing Zuffa’s Fighter Wage Share of [REDACTED] with the
7 Wage Share paid by other MMA promoters with less market power: Bellator—[REDACTED] of total
8 revenues—and Strikeforce before Zuffa acquired it—[REDACTED] of total revenues. SR1 ¶¶190, 247. Dr.
9 Zimbalist confirms Dr. Singer’s damages analysis, showing that the MLB, the NBA, the NFL, the
10 NHL, and boxing all pay [REDACTED] of total revenues to athletes. ZR1 ¶¶104-05; CD, Ex. 10 (Zimbalist
11 Errata) at Table 4-E.

12 **IV. THE DAUBERT STANDARD**

13 Federal Rule of Evidence 702 allows admission of expert opinions based on “scientific,
14 technical, or other specialized knowledge” if they would “help the trier of fact to understand the
15 evidence or to determine a fact in issue.” Expert opinions are admissible if they are relevant and
16 reliable. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993). Rule 702 “should be applied
17 with a ‘liberal thrust’ favoring admission.” *Messick v. Novartis Pharm. Corp.*, 747 F.3d 1193, 1196 (9th
18 Cir. 2014); *see also In re High-Tech Emp. Antitrust Litig.*, 2014 U.S. Dist. LEXIS 47181, at *10 (N.D.
19 Cal. Apr. 4, 2014) (same). The inquiry is a “flexible one” where even “shaky but admissible evidence is
20 to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not
21 exclusion.” *Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir. 2010). The Court’s “gatekeeping function”
22 under *Daubert* is to exclude only “junk science.” *Ellis v. Costco Wholesale Corp.*, 657 F.3d 970, 982
23 (9th Cir. 2011).¹⁴

24
25 ¹⁴ Zuffa cites inapposite cases in which scientific experts sought to apply wholly speculative and
26 untested methods to demonstrate causation. SD at 6 (citing *Domingo ex rel. Domingo v. T.K.*, 289 F.3d
27 600, 605-07 (9th Cir. 2002) (experts did not present “objective and verifiable evidence of the validity of
28 [the] theory” nor did they cite *any* objective source, learned treatise, or published article supporting
their method); *Cooper v. Brown*, 510 F.3d 870, 880 (9th Cir. 2007) (no evidence the expert’s method

1 *Daubert*'s "focus is on the 'principles and methodology' applied, not the conclusions they
 2 generate[.]" *U.S. v. Riley*, 2014 WL 537013, at *5 (D. Nev. Feb. 7, 2014); *see also Virgin Valley Water*
 3 *Dist. v. Vanguard Piping Sys. (Canada), Inc.*, 2011 WL 117259, at *2 (D. Nev. Jan. 13, 2011). "When
 4 the methodology is sound, and the evidence relied upon is sufficiently related to the case at hand,
 5 disputes about the degree of relevance or accuracy (above this minimum threshold) may go to the
 6 testimony's weight, but not its admissibility." *Lidoderm*, 2017 WL 679367, at *28.

7 **V. ZUFFA'S *DAUBERT* ATTACKS ON DR. SINGER LACK MERIT**

8 **A. Dr. Singer's Analysis Based on Wage Share Is Proper**

9 There are two key issues in this case. The first involves *foreclosure*: whether Zuffa's Scheme of
 10 locking up more and more Fighters to long-term, exclusive contracts enhanced its dominance of the
 11 market for MMA Fighter Services. The second involves *wage suppression*: whether Zuffa used that
 12 enhanced dominance to pay its Fighters less than it would have in a competitive market. Dr. Singer
 13 answers both questions in the affirmative with his rigorous regression model.

14 Dr. Singer's impact regressions measure the relationship between Wage Share and Foreclosure
 15 Share, controlling for hundreds of factors that could affect Fighter compensation. He finds that as
 16 Zuffa's Foreclosure Share went up, its Fighter Wage Share went down. That shows Zuffa's exclusive
 17 contracts enhanced its market power because the ability to pay workers less than competitive
 18 compensation *is* market (monopsony) power. SR1 ¶¶143, 145, 212; SR2 ¶36 & n.118. It also shows
 19 Zuffa used its growing monopsony power to pay its Fighters progressively less than it would have in a
 20 more competitive market (*i.e.*, the model demonstrates impact). He concludes that in a world absent the
 21 Scheme, Zuffa's Fighter Wage Share would have [REDACTED]

22
 23 _____
 24 "can be or has been tested," was ever subjected to peer review, or discussed in scientific literature);
 25 *Cabrera v. Cordis Corp.*, 134 F.3d 1418, 1421-22 (9th Cir. 1998) (expert did not explain any basis for
 26 "the accuracy of his testing measure, and could not 'point to some objective source . . . to show that [he
 27 has] followed the scientific method, as it is practiced by (at least) a recognized minority of scientists in
 28 [his] field'"). Plaintiffs' experts here apply standard economic methods, and in any event, economics is
 not the same as the hard sciences. *See, e.g.*, AREEDA & HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF
 ANTITRUST PRINCIPLES AND THEIR APPLICATION, ¶309a ("economics' criteria for testability, and
 certainly for falsifiability, sometimes fall short of the criteria stated for other sciences").

as it did during the Class Period. SR1 ¶¶250-51 & Table 11; SR2 ¶¶172, 174.

Remarkably, Zuffa does not dispute much of Dr. Singer’s analysis. It *concedes* that its Event Revenues [REDACTED]. SR2 (backup materials); SR3 n.6 & Figure A1.¹⁵ It also *concedes* that the Fighters [REDACTED]. *See infra* V.A.4. It *concedes* too that as a firm’s monopsony power grows, so does the gap between the amounts it pays its workers and the revenues the workers generate.¹⁶ And it even *concedes* that Zuffa’s “[REDACTED].” TR1 ¶27 (emphasis original). What Zuffa *contests* is less clear and keeps changing.

1. Wage Share Is Widely Used in Assessing Compensation of Athletes.

Zuffa’s economists all originally rejected Wage Share as meaningless.¹⁷ That position was indefensible. Numerous academic publications—peer-reviewed articles and standard textbooks—use Wage Share in analyzing compensation to athletes, including to assess the effect of monopsony power on professional athlete compensation. SR2 ¶¶88-107; ZR2 ¶¶45-51.¹⁸ Indeed, Zuffa’s economist, Dr.

¹⁵ Dr. Singer prepared a Supplemental Expert Report (SR3), dated April 3, 2018, to respond to the (unauthorized) Sur-Rebuttal Expert Report of Prof. Robert H. Topel (February 12, 2018).

¹⁶ Ex. 56 (Topel Dep. 1) at 46:4-10 (“Q. So if the market’s competitive, the athlete will get paid equal to his marginal revenue product; and if there’s monopsony power in the market, the athlete will get paid below [it], correct? A. Yeah. All athletes, not just Zuffa.”).

¹⁷ *See, e.g.*, TR1 ¶127 (wage share “is not a measure of anything useful or informative”); OR1 ¶15 (“Labor economists do not use labor share as a way to evaluate worker compensation or to benchmark competition in competitive labor markets.”); BR1 ¶44 (wage share “has no foundation in economic theory”).

¹⁸ *See, e.g.*, CD2, Ex. 72 (Gerald W. Scully, *Pay and Performance in Major League Baseball*, 64(6) THE AMERICAN ECONOMIC REVIEW 915 (1974)) at 927-929 & Table 2 (finding that MLB athlete salaries came to only about 15 to 20 percent of athlete MRP, and concluding that, before free agency (in the late 1960s), monopsonistic exploitation was significant in the labor market for professional baseball players); CD2, Ex. 73 (Gerald W. Scully, *Player Salary Share and the Distribution of Player Earnings*, 25(2) MANAGERIAL AND DECISION ECONOMICS 77 (2004)) at 78 & Table 1 (analyzing wage share to assess monopsony power in MLB, NBA, NFL, and NHL and finding that, for each sport, compensation increased significantly *as a share of revenue* after free agency was introduced); CD2, Ex. 75 (James Monks, *Revenue Shares and Monopolistic Behavior in Intercollegiate Athletics*, 2 (Cornell Higher Education Research Institute Working Paper 155, September 2013), *available at* <https://www.ilr.cornell.edu/sites/ilr.cornell.edu/files/WP155.pdf>) at 4 (analyzing “the degree to which the NCAA’s cap on player remuneration . . . restricts the *share of revenue* returned directly to the

Topel, in a study commissioned by NFL Players Association, used Wage Share, analyzing “[t]he percentage of total revenues paid to [NFL] players.”¹⁹ So did Zuffa itself, in a 2013 chart, tracking “
[REDACTED]
[REDACTED]. CD2, Ex. 85 (ZFL-1484034-37) at 35. And in June 2016, just before the sale of the UFC to WME-Endeavor, Zuffa warned “[REDACTED]
[REDACTED],” and observed that [REDACTED]
[REDACTED]” CD, Ex. 41 (WME_ZUFFA_0001150) at 11; *see also* SR2 ¶108. The one scholar both sides agree is “particularly authoritative,”²⁰ Dr. Manning, confirms labor economists use Wage Share to assess the effects of monopsony power on compensation. MR1 ¶¶5-31.

Under these circumstances, it is not surprising that Zuffa now concedes use of Wage Share is at times appropriate, such as when economists “attempt to analyze the impact of an observed *change* in monopsony power.” SD at 15 (emphasis in original). More surprising are the shifting ways Zuffa characterizes the alleged flaws in the way Dr. Singer uses Wage Share.

2. Wage Share Can Be Used to Assess Changes in Monopsony Power *and* its Existence.

Zuffa claims that the “fundamental difference” between Dr. Singer’s analysis and the extensive literature he cites is that economists typically use Wage Share “to analyze the impact of an observed *change* in monopsony power,” but not to “infer the *existence* of monopsony power.” SD at 15 (emphasis in original). That argument mischaracterizes Dr. Singer’s analysis. Dr. Singer uses Wage Share in precisely the way Zuffa says is appropriate: to assess the impact of *changes* in Zuffa’s

players, in comparison to professional athletic leagues in the United States” and explaining that the NCAA “operates as a collusive monopsony in the labor market for athletic (player) talent” (emphasis added); CD2, Ex. 74 (John Twomey & James Monks, *Monopsony and Salary Suppression: The Case of Major League Soccer in the United States*, 56(1) THE AMERICAN ECONOMIST 20 (2011)) at 1 (using wage share to assess monopsony power in Major League Soccer and noting it devotes “only about 25 percent of its revenues to player salaries, compared to 50 to 60 percent in most other U.S. professional sports and professional soccer leagues”); *see also* SR2 ¶98.

¹⁹ CD2, Ex. 78 (Kevin Murphy and Robert Topel, “The Economics of NFL Team Ownership,” Chicago Partners, (2009)) at 2 (prepared at the request of the NFL Players’ Association).

²⁰ CD2, Ex. 55 (Oyer Dep.) 123:4-6; *see also id.* 122:17-21 (admitting “Alan Manning is a recognized expert and leader in the thinking of monopsony—analysis of monopsony in labor markets”).

monopsony power. He explains: “The impact regressions . . . are designed to test the hypothesis that *an increase* in Zuffa’s foreclosure of the Relevant Input Market (or Submarket) allows Zuffa to exercise *more* monopsony power, by paying Fighters a smaller share of Event Revenue.” SR2 ¶¶73.²¹ Dr. Singer’s Foreclosure Share measures *changes* over time in the share of Fighters that Zuffa has locked up in long-term exclusive contracts. SR1 at III.C.2.²² In support, he cites published academic papers that specifically link *growing* market dominance to *falling* Wage Share. SR2 ¶¶103-04, 106-07; *see, e.g.*, CD2, Ex. 77 (Simcha Barkai, *Declining Labor and Capital Shares* 25-26 (U. of Chicago, New Working Paper Series No. 2, 2016) (“Barkai (2016)”) (“***I find that that an increase in [market] concentration is associated . . . with a decline in the labor share.***”) (emphasis added). Moreover, as Dr. Singer observes, multiple published papers focusing on professional sports have used Wage Share as he does, *i.e.*, to model the effects of moving from a labor market with restrictive contracts to a market with free agency. *See* SR2 ¶¶92-100.

The distinction Zuffa draws between assessing the *existence* of monopsony power and a *change* in monopsony power is also incoherent. Evidence capable of showing that conduct *increases* monopsony power necessarily implies—and is thus direct evidence of—the *existence* of monopsony power.²³ It therefore makes sense that economists—particularly in sports—have inferred the *existence*

²¹ *See also* SR2 ¶¶3, 68 (impact regressions measure effects of *changes* in monopsony power).

²² The underlying hypothesis that he tests—a change in foreclosure of competition causes a change in market power and thus a change in prices or compensation—is well established. *See* Steven C. Salop, *The Raising Rivals’ Cost Foreclosure Paradigm, Conditional Pricing Practices and the Flawed Incremental Price-Cost Test*, 81(2) ANTITRUST L.J. 371, 372-373 (2017) (in assessing the effects of an exclusive dealing scheme “[t]he proper focus should be placed on the magnitude of the foreclosure and possible consumer harm”); *see also* *Twin City*, 676 F.2d at 1304 (magnitude of exclusive contracts places “a significant amount of potential concession business beyond the grasp of any competitors”).

²³ *See* SR1 ¶143 (“The ability to suppress compensation below competitive levels constitutes direct evidence of Zuffa’s substantial market power, and in particular, monopsony power.”); *see also, e.g., In re High-Tech Emp. Antitrust Litig.*, 856 F. Supp. 2d 1103, 1122 (N.D. Cal. 2012) (allegation that “Defendants succeeded in lowering the compensation and mobility of their employees below what would have prevailed in a lawful and properly functioning labor market” is sufficient “to infer that Defendants had . . . market power”) (citing *Theme Promotions, Inc. v. News Am. Mktg. FSI*, 546 F.3d 991, 1001 (9th Cir. 2008)) (“Evidence of restricted output and supracompetitive prices is direct evidence of market power.”) (internal quotation omitted)).

of monopsony power from relatively low Wage Shares in published work.²⁴ Further, Zuffa's distinction relies on lawyer speculation; it is not supported by the opinions of Zuffa's economists. Attorney speculation does not constitute evidence. *Carrillo-Gonzalez v. INS*, 353 F.3d 1077, 1079 (9th Cir. 2003) (lawyer argument is not evidence).²⁵

3. Zuffa's Claim that Dr. Singer's Use of Wage Share Is Not "Standard" Is Incorrect and Misses the Point.

Zuffa appears to concede that Dr. Singer is correct to use regression analyses. But it claims that the "standard way" to structure the regression focuses on wage *levels*—measured in dollars—rather than on Wage Share. More technically, Zuffa claims the "dependent variable" in a regression is usually wage level, not Wage Share. SD at 13. Zuffa then cites two cases—one involving nurses and the other high-tech employees—that used wage levels as the dependent variable in regression analyses. *Id.*

As Plaintiffs' experts explain, however, professional athletes are not "standard" workers. SR2 ¶120; MR1 ¶24. Revenues from sporting events depend on the talent and notoriety of the athletes, and thus economists and industry participants recognize the athletes generate a *percentage* of those revenues. SR2 ¶¶72, 89-91, 93-102, 108, 111-15, 118, 120; MR1 ¶¶24-28; ZR2 ¶46. That is especially true for combat sports, such as MMA, [REDACTED] [REDACTED] SR1 ¶20; SR2 ¶108 & n.401; *see also infra* at V.A.4. Zuffa's economists have conceded that Fighters play a substantial role in generating Event Revenues. *See, e.g.,* SR2 ¶¶112-114 (citing admissions of Drs. Topel, Blair, and Oyer about the direct connection between Fighter quality and revenues generated at events). Indeed, regression analyses by Zuffa's own expert, Dr. Topel, show [REDACTED] [REDACTED]. SR2 ¶114; SR3 ¶¶35-37.²⁶ Dr. Singer's impact regressions produce a similar result, albeit with

²⁴ *See, e.g.,* SR2 ¶98 (citing a study by Profs. Twomey and Monks concluding from the disparity of wage shares between Major League Soccer ("only about 25 percent") and most other U.S. professional sports ("50 to 60 percent") that the former had been effective in exercising monopsony power); *id.* ¶99 (citing a 2013 Study by Prof. Monks concluding from disparity in *share* of revenues going to athletes that the NCAA has monopsony power).

²⁵ *See also DuBray Land Servs. v. Schroder Ventures U.S.*, 488 F. Supp. 2d 1109, 1114 (D. Mont. 2007) (same).

²⁶ As Drs. Singer and Manning explain, and as discussed below, Dr. Topel's regressions are flawed [REDACTED]

1 a far more substantial effect, showing that, under more competitive conditions, Fighter compensation
2 would have risen *at least* as fast as Event Revenues. SR2 ¶¶5, 40, 74; SR3 ¶29.

3 The same is not true for many other workers. People do not usually pick a hospital based on the
4 identity of a nurse or buy software based on the identity of an engineer, making it difficult to measure
5 revenues generated by such employees. MR1 ¶24.²⁷ Nonetheless, in rare cases where there is a
6 relatively close relationship between the productivity of workers and revenues, use of Wage Share is
7 appropriate to evaluate the impact of labor restrictions. Thus, even by Zuffa's own account, where the
8 traveling nurses in *Johnson*, 2009 WL 5031334, at *8, were paid a percentage of their billings, the court
9 certified a class "based on Dr. Singer's wage share method." SD at 14.²⁸ In any case, what is unusual
10 for "standard" workers is "standard" for professional athletes. Whatever form their contracts take, the
11 athletes involved generate a portion of revenues from sporting events and their compensation is best
12 analyzed in Wage Share.²⁹ That is why economists analyzing monopsony power and professional

13
14 [REDACTED]
15 SR2 at II.D; SR3 at I.C; CD2, Ex. 61 (Manning Dep.) at 129:2-23. Indeed, according to Dr. Topel's
16 model, [REDACTED]

17 [REDACTED]. Dr. Manning testified that this effect is so implausibly small (even while the Scheme was
18 in place) that Dr. Topel "should have had alarm bells going off in his head that there was something
19 wrong with it." *Id.*

20 ²⁷ This explains why Zuffa's observation is irrelevant that the experts evaluating wage suppression
21 claims used wage levels (not Wage Share) in *Reed v. Advocate Health Care*, 268 F.R.D. 573, 581-98
22 (N.D. Ill. 2009) and *In re High-Tech Employee Antitrust Litig.*, 289 F.R.D. 555, 558 (N.D. Cal. 2013).
23 SD at 13. Unlike in this case, there was no reasonable way—and insufficient data available—to ascribe
24 a particular portion of hospital revenues to the employee nurses in *Reed*, or to draw a direct link
25 between the work of tech employees in *High-Tech* and the revenues of the tech giant defendants in that
26 case. *See, e.g.*, SR2 ¶120 ("an increase in the [productivity] . . . of an individual technical employee
27 would have no material effect on Apple's total corporate revenue. . . . In contrast, the revenue that Zuffa
28 earns *at a particular event* is not independent of compensation paid to Fighters *at that event*")
(emphasis in original).

29 ²⁸ Similarly, Zuffa's own expert, Dr. Oyer, admitted sales people are sometimes paid a proportion of
30 their sales and, as Dr. Singer explains, their compensation is appropriately assessed using Wage Share.
31 SR2 ¶89 (citing OR1 ¶16 & CD2, Ex. 55 (Oyer Dep.) at 81:25-82:4).

32 ²⁹ Zuffa's economist, Dr. Oyer, admitted that how a worker is paid—in set dollars or as a percentage of
33 revenue—does not determine how to analyze worker compensation. CD2, Ex. 55 (Oyer Dep.) at 91:2-
34 9. Professional athlete compensation is largely set in dollar amounts, not as a percentage of revenue, yet
35 economists still use Wage Share for them. For some MMA Fighters, their pay is, in part, set as a
36 percentage of Pay-Per-View revenues. SR1 ¶32.

1 athlete compensation *routinely* use Wage Share. SR2 ¶¶88-102; ZR2 ¶¶45-49. Zuffa does not cite any
2 authority rejecting use of Wage Share in analyzing pay to professional athletes.

3 In fact, given the direct connection between MMA Fighters and revenues, use of wage levels—
4 rather than Wage Share—would be misleading. If Zuffa’s Event Revenues went up significantly, but its
5 wage levels increased only slightly, that would be a sign that Zuffa had *increased* the gap between the
6 amounts it paid its Fighters and competitive compensation; yet using wage levels would mask this
7 evidence of increasing monopsony power. As Dr. Singer has explained: “A singular focus on
8 compensation levels alone . . . would miss the real story where athlete compensation is growing at a far
9 slower rate than the revenues athletes are generating for their respective teams or firms.” SR2 ¶94; *see*
10 *also* SR3 at I.C. Dr. Topel himself admitted that focusing on wage *levels*, instead of Wage Share, could
11 be misleading because merely observing increasing compensation would be insufficient to assess
12 whether Zuffa increasingly exercised monopsony power over time, the crucial issue in this case. SR2
13 ¶39, n.126 (discussing Topel’s admission).

14 Zuffa’s criticism of Wage Share is also not an appropriate argument under *Daubert*. There is no
15 “widespread acceptance” requirement, nor must an expert use the “standard” method to be admissible.
16 *Daubert*, 509 U.S. at 583; *see also id.* at 588–89 (citing *Frye v. U.S.*, 54 App. D.C. 46 (D.C. Cir. 1923))
17 (“*Frye* made ‘general acceptance’ the exclusive test for admitting expert scientific testimony. That
18 austere standard, absent from, and incompatible with, the Federal Rules of Evidence, should not be
19 applied in federal trials.”); *Hopkins v. Dow Corning Corp.*, 33 F.3d 1116, 1124–25 (9th Cir. 1994)
20 (“according to *Daubert* and Rule 702, the testimony of these experts need not be based on ‘generally
21 accepted’ methodologies”).³⁰ Nor does admissibility under *Daubert* require a finding that Dr. Singer
22

23
24 ³⁰ *See also Primiano*, 598 F.3d at 564 (“*Daubert* held that Federal Rule of Evidence 702 replaces the
25 old *Frye* gatekeeping test, ‘general acceptance in the particular field’”); *Fed. Trade Comm’n v.*
26 *Amazon.com, Inc.*, 2016 WL 1221654, at *1 (W.D. Wash. Mar. 29, 2016) (“In *Daubert*, the Supreme
27 Court rejected the rigid ‘general acceptance’ test for the admissibility of scientific evidence.”); *Apple*
28 *iPod iTunes Antitrust Litig.*, 2014 WL 4809288, at *8 (N.D. Cal. Sept. 26, 2014) (denying exclusion of
expert opinions about econometrics on ground that they were not generally accepted, and stating “[t]he
purported lack of peer review or common acceptance of [the expert’s] views does not necessarily
justify exclusion”).

1 used the “best” method of analysis. Even if Zuffa were correct that it is best to use wage *levels* and not
 2 Wage *Share*—it is not—that still would not render Dr. Singer’s analyses inadmissible. “The standard
 3 for admissibility is reliability, not superiority.”³¹

4 Zuffa also claims that no publication has used Wage Share in precisely the way Drs. Singer and
 5 Manning do. That point too is wrong and irrelevant. Dr. Manning explains that use of Wage Share is
 6 proper when the goal is to compare actual compensation to what it would be in a more competitive
 7 market, when the relevant data are available, and when workers are responsible for an identifiable
 8 proportion of revenues, as MMA Fighters are. MR1 ¶¶6, 24-31. And he concludes that use of Wage
 9 Share is appropriate in this case. *Id.* ¶31. Zuffa has not moved to exclude those opinions. But it argues
 10 that no publication has set forth the conditions for using Wage Share in just the way Dr. Manning does.
 11 As Zuffa admits, Dr. Manning’s endorsement of Singer’s method relies on “well-established ideas” in
 12 his field, “combining them in a way that is appropriate for this case.” SD at 16-17 (quoting CD2, Ex. 61
 13 (Manning Dep.) at 38:12-20). Zuffa denies none of that. The only criticism it levels against his
 14 approach is that it is “new;” that is, Zuffa claims the established principles have not been applied in just
 15 the way Dr. Manning (or Dr. Singer) applies them. *Id.* at 11-12, 17. That is not true. The sports-related
 16 studies Dr. Singer references that use Wage Share do so based on the same rationale Dr. Manning
 17 offers, *i.e.*, because the researchers recognize that (a) their ultimate goal is to determine the degree to
 18 which labor market restrictions create monopsony power and suppress worker pay *and* (b) the athletes
 19 are responsible for generating an identifiable portion of revenue. *See, e.g.*, SR2 ¶¶8, 93-102. Zuffa’s
 20 argument is also irrelevant. Even if Drs. Manning and Dr. Singer were implementing well-accepted
 21 ideas in a new way, their testimony would be admissible. Expert testimony need not apply established
 22 principles in just the way they have been applied before. *Daubert* explicitly *rejected* such a

23
 24
 25 ³¹*Trailer Sales of Kansas City, Inc. v. MAC Trailer Mfg., Inc.*, 267 F.R.D. 368, 371 (D. Kan. 2010); *see*
 26 *also United States v. W.R. Grace*, 455 F. Supp. 2d 1203, 1206–07 (D. Mont. 2006) (where “methods are
 27 arguably not the best methods for use in the situation . . . [it] goes to the weight [not admissibility] of
 28 the evidence and testimony”); *Oracle Am., Inc. v. Google Inc.*, 2012 WL 850705, at *14 (N.D. Cal.
 Mar. 13, 2012) (same).

1 requirement. *See supra*, at 16-17.³²

2 Another of Zuffa's arguments fails for similar reasons. Zuffa claims "there is no previous case
3 in the field of economics or a court relying on a regression that shows a relationship between 'wage
4 share' and a regressor (in this case, 'foreclosure share') when the same regressions show no relationship
5 between actual wages and that regressor." SD at 13. But Zuffa does not identify a single source
6 *rejecting* use of Wage Share as the dependent variable in a regression simply because using wage levels
7 produced a different result.³³ And Zuffa cannot deny that regressions, market foreclosure, and Wage
8 Share are all well established. It cannot even deny that economists use Wage Share as the dependent
9 variable in regressions specifically to assess anticompetitive effects from market concentration, for, as
10 Dr. Singer points out, economists have done so in published work.³⁴ Moreover, as Zuffa itself admits,
11 the court in *Johnson*, 2009 WL 5031334, certified a class of nurses in a monopsony case "where the
12 expert used the wage share method—and [Dr. Singer] was that expert." SD at 14 (emphasis in
13 original).³⁵ Further, the one expert in this case whom all sides agree is authoritative, Dr. Manning,
14 concludes that Dr. Singer uses Wage Share properly *in this case*. MR1 ¶¶5-31.

15
16 ³² The sole case Zuffa cites, *Cabrera*, 134 F.3d at 1422, SD at 17, undermines its position. The Ninth
17 Circuit there held expert testimony is admissible if an expert can "point to some peer-review articles or
18 research supporting his conclusion" or he can "explain precisely how [he] went about reaching [his]
19 conclusions and point to some objective source . . . to show that [he has] followed the scientific
20 method, as it is practiced by (at least) a recognized minority of scientists in [his] field.'" *Id.* (quoting
21 *Daubert v. Merrell Dow Pharm.*, 43 F.3d 1311, 1319 (9th Cir. 1995) (modifications in original)). Dr.
22 Singer does both.

23 ³³ In addition, as shown just above, *supra* at 16, there are good reasons to believe that regressions run
24 in this case using wage levels (and not Wage Share) would mask the effects of monopsony power.

25 ³⁴ See SR2 ¶¶104, 107 (citing academic papers using Wage Share as dependent variable in regression
26 analyses); CD2, Ex. 60 (Singer Dep. 2) at 489:24-490:4 ("The Autor paper that Dr. Oyer originally
27 cited . . . [uses] labor share as the dependent variable in econometric analysis."); CD2, Ex. 77 (Barkai
28 (2016)) ("I provide reduced form empirical [regression] evidence . . . [that] show[s] that those industries
that experience larger increases in concentration also experience larger declines in the labor share.").

³⁵ Zuffa says that Wage Share was appropriate in *Johnson* because the workers (nurses) were
specifically paid a share of the revenue they generated for hospitals. *Id.* That is a critical admission. As
Dr. Singer points out,

[REDACTED] . SR2 ¶¶72, 74-75, 92-93, 108, 111-15,
118-20. Further, that the court certified only one of the two proposed classes had nothing to do with
Wage Share, but rather with factors Zuffa does not claim are relevant here.

4. **Dr. Singer Has a Sound Empirical Basis for Using Changes in Event Revenues as a Proxy for Changes in Fighter Productivity.**

Plaintiffs’ and Zuffa’s experts agree on many of the key economic concepts that underlie Dr. Singer’s regression analyses. The experts define the marginal revenue product of labor (“MRPL,” “MRP,” or “marginal product”) as the additional value that a worker creates, holding all else constant. SR2 ¶8; ZR2 ¶29; OR1 ¶16; SD at 17. They acknowledge that it is rarely, if ever, possible to measure MRP directly, so economists “estimate” and rely on a “proxy” for MRP. OR1 ¶17; *see also* SR2 ¶8 (“as economists recognize, MRP is not directly observable”); ZR2 ¶¶29-34; MR1 ¶14. They agree that in a competitive market a firm pays a worker his or her MRP—that is, the additional value the worker creates.³⁶ They agree that monopsonists are able to pay workers less than their MRP.³⁷ And they attribute differences in “pay across workers with and without monopsony power” to “the difference in the ability of a monopsonistic and a competitive firm to withhold some of a worker’s marginal product.”³⁸ In contrast to these areas of agreement, Zuffa’s attacks on Dr. Singer’s analysis are limited.

Zuffa’s *lawyers*—but not its economists—criticize Dr. Singer for not measuring MRP directly. SD at 17-18. Zuffa declares: “If MRPL is not directly observable, and there is no accepted way to empirically measure it, there is no way to test whether it equals or even reasonably approximates event revenue.” SD at 18. But, once again, Zuffa’s argument cites no expert opinions, and so lacks evidentiary support. *Carrillo-Gonzalez*, 353 F.3d at 1079. Moreover, if Zuffa were right, the entire literature on labor economics and monopsony power would be inadmissible, for, as noted above, Zuffa’s own experts acknowledge direct measurement of MRP is rarely, if ever, possible. OR1 ¶17; *see also* SR2 ¶8. The literature, like Dr. Singer, uses proxies for MRP.

Zuffa also claims that Dr. Singer *assumes* nearly all its Event Revenue is attributable to

³⁶ SR2 ¶¶8, 92; ZR2 ¶29; OR1 ¶15 (“Labor economists start from the basic principle that, in a competitive market, a firm will be willing to pay a worker up to the ‘marginal product’ of that worker’s labor.”); MR1 ¶11 (noting consensus among the experts on this point).

³⁷ OR1 ¶18; SR2 ¶¶36, 38, 92; ZR2 ¶29; CD2, Ex. 56 (Topel Dep. 1) at 46:4-10; CD2, Ex. 58 (Blair Dep. 1) at 120:21-121:14.

³⁸ OR1 ¶18; SR2 ¶8 (“The bigger the gap between a Fighter’s MRP and her wage, the more monopsony power the firm is exercising.”).

Fighters, and that Zuffa’s “promotional efforts, the quality of its television production, management, matchmaking decisions, or other drivers of a quality event,” SD at 18, play little role in revenue creation. *See also* SD at 17-20. Not so. Nothing about Dr. Singer’s use of Wage Share or his analysis more generally *assumes* the relative contributions to Event Revenue generation of the Fighters, on the one hand, or Zuffa, on the other. SR3 ¶¶5, 17-19.³⁹ Zuffa is confusing assumptions with findings. Dr. Singer’s impact regressions *find* that, without the Scheme, Zuffa’s Fighter Wage Share would be [REDACTED] [REDACTED]—not close to 100%, as Zuffa implies. In any case, that Zuffa or its experts disagree with the *output* of Dr. Singer’s model is not a basis to exclude it. *See Virgin Valley Water Dist.*, 2011 WL 117259, at *2 (“[a] court should not strike expert testimony under *Daubert* simply because the parties dispute the expert’s ultimate conclusions”); *Ortega v. Nat. Balance Inc.*, 2014 WL 12560623, at *4 (C.D. Cal. Oct. 29, 2014) (citing *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)) (“The Court, as the gatekeeper, is not determining the conclusions of Mr. England as right or wrong. Rather, the Court’s focus will follow the principles and methods used, not the conclusions generated.”).

While Dr. Singer does not find that the Fighters are responsible for *all* the growth in Zuffa’s Event Revenues, he does in fact show that Fighters are responsible for a measurable *proportion* of that growth. SR2 ¶¶72, 74, 111-13, 118, 120; SR3 ¶¶5, 17-19, 29. That finding is grounded in economics and the record. As in other professional sports,⁴⁰ athletes are the major draw for MMA consumers, and

³⁹ *See, e.g.*, CD2, Ex. 52 (Singer Dep. 1) at 122:4-11 (“Q. And you were assuming that all of that average revenue per event, per fighter was the product of that labor as opposed to some other source? . . . A. No, I don’t think I’m assuming that.”); CD2, Ex. 60 (Singer Dep. 2) at 428:14-19 (rejecting that he is assuming that “the marginal revenue product of the fighters collectively in an event would be equal to all of the event revenue”); *id.* at 641:16-23 (testifying “what the literature is telling us it’s the identity of the fighters featured has more to do with explaining the demand [for MMA Events] than the label of the promoter, but I think that both could have an influence . . . on the demand”); CD2, Ex. 52 (Singer Dep. 1) at 120:3-7 (noting “effective marketing and promotion could increase the average revenue per event”). *See also* SR3 ¶¶5, 17-19 (discussing Zuffa’s fallacious argument).

⁴⁰ Dr. Blair admitted that unique skills and other athlete attributes play an important role in the revenues generated by sports organizations because the identity or performance of the individual workers is “a specific feature of the demand on the part of the fan base or consumers . . . that can influence how many people are willing to buy tickets to watch . . . [a]nd how much they’re willing to pay for those tickets.” CD2, Ex. 58 (Blair Dep. 1) at 18:7-14, 20:15-19.

thus are a key driver of Zuffa's Event Revenue.⁴¹ Indeed, matchups involving popular, highly-ranked, headlining Fighters sell more PPV buys, event tickets, and so on, than do matchups involving less prominent Fighters.⁴² Even Dr. Topel acknowledged [REDACTED]. CD2, Ex. 56 (Topel Dep. 1) at 241:4-16 (discussing CD, Ex. 41 (WME-ZUFFA-00001150)).

According to Dr. Manning, where it is possible to ascribe a portion of a firm's revenues to the efforts of a particular group of workers, such as revenues generated by sporting events, *changes in Event Revenue* will track *changes in athlete MRP*. MR1 ¶23. In those circumstances, measuring changes to compensation over time as a share of revenues—as Dr. Singer does here by using Wage Share—is equivalent to measuring changes to worker pay as a share of MRP. As Dr. Manning explains, Fighter MRP “will change with the number of people watching and the amount they pay If

⁴¹ SR1 ¶20 (citing record evidence demonstrating [REDACTED]); *id.* ¶¶156-164 (showing that [REDACTED]). Dr. Singer also cited a study showing that “[REDACTED].” SR2 ¶108, n.401 (quoting CD2, Ex. 76 (Richard McGowan and John Mahon, *Demand for the Ultimate Fighting Championship: An Econometric Analysis of PPV Buy Rates* 6(6) J. BUS. & ECON. 1032, 1046 (2015))). Zuffa says the study “concludes only that individual athletes are more important *than the titles for which they are competing*[.]” SD at 18 (emphasis in original). But the context of that study—and MMA more generally—is that each promoter has its own “titles,” and thus “title” is being used as a synonym for promoter. How else to explain the study's conclusion: “The results of our study are not good news for the UFC as a company.... **The fighter** has more drawing power than **the brand**”? CD, Ex. 76 (McGowan and Mahon (2015)) at 1046 (emphasis added). Zuffa also references testimony by Carlos Silva, the CEO of an MMA promoter, who agrees that “better known fighters in terms of consumer awareness generally attract more viewers,” but testifies that he cannot explain why. SD at 18-19 (quoting C. Silva Dep. 169:2-9). That testimony supports Plaintiffs' point: the attributes of Fighters matter to the generation of Event Revenues. Silva's inability to “explain why” is irrelevant.

⁴² See SR2 ¶108 (discussing the “[REDACTED]”); *id.* ¶¶111-114 (same); *id.* ¶132 (Zuffa relies heavily on Headliners (top 15 Fighters), and at least one of the Fighters was a Headliner in 158 of 159 events UFC PPV events from 2005 to May 2017); *id.* ¶130 [REDACTED].

Further, Dr. Singer's regression model itself shows that Zuffa's Wage Share was consistent, controlling for Foreclosure Share and other factors, which means that Fighter compensation is proportional to Event Revenues. SR3 ¶¶11, 21, 28, 29.

1 revenue for the fight is twice as large then the MRPL is twice as high and fighter compensation in a
 2 competitive market would be twice as high. So the marginal revenue product will be proportional to the
 3 event revenue.” MR1 ¶¶26-27.

4 Finally, challenges to any assumptions or findings Dr. Singer makes in building his model
 5 would not be appropriate grounds for exclusion. *Lidoderm*, 2017 WL 679367, at *18 (such disputes are
 6 “appropriately reserved for the trier of fact (or possibly resolution on summary judgment depending on
 7 what the facts show”); *Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir. 2002) (“[T]he
 8 burden of exploring the facts and assumptions underlying the testimony of an expert witness [is] on
 9 opposing counsel during cross-examination.”).⁴³

10 Relying on pure attorney speculation, Zuffa also claims that Dr. Singer *might* have omitted from
 11 his regressions some unidentified variable that *might* replace rising Foreclosure Share as an explanation
 12 for why Zuffa’s Wage Share fell over the relevant period. SD at 15, 19-20. Zuffa muses that other
 13 factors could have caused its Wage Share to fall, such as: (a) *if* there were “changes in supply or
 14 demand that are unrelated to competition for labor,” or (b) “*if* Zuffa increase[d] its advertising.” SD at
 15 19 (emphasis added). Neither Zuffa nor its experts offer any *evidence* that either of these things even
 16 occurred, let alone that either is the reason Wage Share fell. Nevertheless, Dr. Singer controls for both
 17

18 ⁴³ See also *Altana Pharma AG v. Teva Pharms. USA, Inc.*, 2013 U.S. Dist. LEXIS 74210, *13-14
 19 (D.N.J. May 14, 2013) (where an expert’s analysis allegedly “fails to account for essential facts, and in
 20 some instances, is based on faulty premises . . . [it] may be a valid basis upon which a reasonable jury
 21 may decide not to credit [the] . . . opinions. It is not, however, a basis upon which to exclude . . .
 22 testimony”); *In re Cathode Ray Tube Antitrust Litigation*, 2013 WL 5391159, at *9 (N.D. Cal. Sept. 24,
 23 2013) (same); *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 290 (3d Cir. 2012) (same); Fed. R. Evid.
 24 702 advisory comm. notes (2000) (“When facts are in dispute, experts sometimes reach different
 25 conclusions based on competing versions of the facts. The emphasis in the amendment on ‘sufficient
 26 facts or data’ is not intended to authorize a trial court to exclude an expert’s testimony on the ground
 27 that the court believes one version of the facts and not the other.”).

28 Zuffa cites *In re Photochromic Lens Antitrust Litig.*, 2014 WL 1338605 (M.D. Fla. Apr. 3,
 2014), charging that the court there disagreed with Dr. Singer’s use of certain data in place of the
 transactional data. SD at 18, n.10. But the Magistrate Judge explained that Dr. Singer “cannot be
 faulted for failing to use transactional data when Defendants acknowledge that the data set was flawed
 at the time Dr. Singer was writing his report on class certification,” *In re Photochromic Len Antitrust
 Litig.*, 2013 WL 8183461, at *9 (M.D. Fla. Mar. 12, 2013), and the corrected data was not produced in
 time to incorporate it. *Id.*

possibilities in his regression. If Zuffa had massively increased its advertising spend, or if there was some large unexplained change in demand for MMA services, his regression would have identified such eventualities and controlled for them. *And none of Zuffa's economists refute that.*

Dr. Singer uses several variables that show Zuffa's attorneys' speculation is wrong, including, e.g.: (i) [REDACTED]

[REDACTED];⁴⁴ and (ii) [REDACTED]

[REDACTED]⁴⁵ In fact, Dr. Singer shows that non-Fighter inputs have, if anything, [REDACTED]

[REDACTED], SR3 ¶29, suggesting that Dr. Singer's model is if anything conservative. So Dr. Singer rules out the possibilities about which Zuffa speculates.

Further, and to be clear, to explain the observed drop in Zuffa's Wage Share, Zuffa's contributions to Event Revenues would have had to increase *faster* than the contributions of the Fighters.⁴⁶ All things equal, if Zuffa's and Fighters' contributions grew at the same rate, absent the

⁴⁴ SR3 ¶29, n.88 (quoting CD2, Ex. 79 (JEFFREY WOOLDRIDGE, INTRODUCTORY ECONOMETRICS: A MODERN APPROACH 360 (Thompson 4th ed. 2009))); *see also* SR1 ¶185; *id.* Table 6. Given that none of Zuffa's economists even suggested that his regression failed to control for the possible contributions of non-Fighter inputs, Dr. Singer did not explain his reasoning in detail in his rebuttal report. One reason for Dr. Singer's Supplemental Report (SR3) is to allow him to respond to Zuffa's lawyers' new argument by explaining the reasoning of his previous work.

⁴⁵ SR3 ¶30; SR1 ¶185 & Table 6. Further, to test Zuffa's new theory, Dr. Singer [REDACTED]

[REDACTED] "SR3 ¶33.

[REDACTED] *ee id.*

⁴⁶ Zuffa's assertion that "if Zuffa succeeds in promoting MMA, its brand and its events, Zuffa's event revenue would increase and it would attract more athletes," SD at 15, and Wage Share would fall even absent increasing foreclosure, is false. Much if not all of this hypothetical promotional spending would also increase the revenue-generating power of Zuffa's Fighters, and thus Fighter MRP would rise with Zuffa inputs, and in a competitive market, Fighters would be paid a proportionate share of that revenue growth.

1 exercise of monopsony power, Wage Share would have remained the same, not fallen. Zuffa has not
 2 even attempted to show its contributions to revenues *grew faster* than those of the Fighters.⁴⁷ And the
 3 record shows the opposite: that, for instance, [REDACTED]
 4 [REDACTED]. *See supra* nn.40-42; *see also* SR3 ¶29.
 5 Zuffa knew lifting restrictions on Fighter mobility, in the words of Dr. Topel, would create “a transfer
 6 of wealth from Zuffa to the athletes.” CD2, Ex. 56 (Topel Dep. 1) at 76:4-77:3; *see also id.* at 84:11-18;
 7 TR1 ¶68. That is because Zuffa also knew that Fighters drive revenue growth. And, in a competitive
 8 market, Fighters would get a larger share of those revenues. Zuffa’s Scheme was, in effect, a means of
 9 ensuring that Zuffa, and not the Fighters, would capture the lion’s share of the Event Revenue growth:
 10 it was a Scheme designed to suppress Wage Share.

11 In addition, Zuffa’s argument is unsupported by *any* of its three economists and relies on mere
 12 lawyer speculation, not evidence. *Carrillo-Gonzalez*, 353 F.3d at 1079. And criticisms based on
 13 potential omitted variables in a regression generally pertain to its weight, not its admissibility. *See*
 14 *Bazemore v. Friday*, 478 U.S. 385, 400 (1986) (“Normally, failure to include variables will affect the
 15 analysis’ probativeness, not its admissibility.”).⁴⁸ That is especially apt here, where Zuffa’s economists
 16 have not identified *any* particular omitted variable, much less shown including such a variable would
 17 have changed Dr. Singer’s results. *Hemmings v. Tidyman’s, Inc.*, 285 F.3d 1174, 1188 (9th Cir. 2002)
 18 (defendant seeking to exclude expert cannot rely on “unsubstantiated assertion[s] of error[.] Rather, the
 19 defendant must produce credible evidence that curing the alleged flaws would also cure the statistical
 20 disparity”) (quotation marks and citation omitted).⁴⁹ The same flaws undermine Zuffa’s claim that Dr.

21 _____
 22 ⁴⁷ Notably, Zuffa fails to cite a single study in sports economics that has attributed a decline in athlete
 23 Wage Shares due to some unexplained input by the owner or league that reduced athletes’ contribution
 24 to revenues.

25 ⁴⁸ *Bernstein v. Virgin Am., Inc.*, 2016 U.S. Dist. LEXIS 154326, at *15 (N.D. Cal. Nov. 7, 2016)
 26 (same); *Apple iPod iTunes Antitrust Litig.*, 2014 WL 4809288, at *6 (same); *Edwards v. Nat’l Milk*
 27 *Producers Fed’n*, 2014 U.S. Dist. LEXIS 130621, at *18-19 (N.D. Cal. Sep. 16, 2014) (same); *Butler v.*
 28 *Home Depot*, 1997 U.S. Dist. LEXIS 16296, at *22-23 (N.D. Cal. Aug. 28, 1997) (same).

⁴⁹ *See also id.* (citation omitted) (“A defendant challenging the validity of a multiple regression analysis
 must make a showing that the factors it contends ought to have been included would weaken the
 showing. . . made by the analysis.”); *In re High-Tech Emp. Antitrust Litig.*, 985 F. Supp. 2d 1167, 1220-
 21 (N.D. Cal. 2013) (rejecting defendants’ assertions about omitted variables and concluding that such

Singer’s use of Wage Share could possibly mask that Event Revenues increased “for procompetitive reasons.” SD at 15. Zuffa presents no evidence that its success in promoting MMA, its brand, or its events increased *faster* than Fighter productivity or that Dr. Singer’s regressions fail to control for that possibility. SR3 ¶¶25-27, 29, 33.

Finally, Zuffa may also be arguing that its Foreclosure Share increased for procompetitive reasons given that it contends that “if Zuffa succeeds [in its promotional efforts] . . . it would attract more athletes.” SD at 15. That makes no sense. If Zuffa had attracted Fighters through alleged “procompetitive” means, but had *not* locked them into exclusionary contracts, then they would not have contributed to Foreclosure Share. Fighters count as foreclosed in Dr. Singer’s model *only* if they are subject to long-term exclusive contracts. SR1 ¶¶169-72. It is the growing effect of the increasingly widespread use of those contracts on competition and compensation that the regression measures—and nothing else.

B. Dr. Singer Does Not Assume Market Foreclosure; He Proves It

Zuffa incorrectly claims that Dr. Singer assumes market foreclosure rather than proves it. SD at 20-22. Dr. Singer measures Foreclosure Share as the percentage of the market covered by Zuffa’s contracts subject to a term of at least 30 months and containing other exclusionary terms. SR1 ¶171. He provides economic evidence supporting this approach to foreclosure in three ways. First, his impact regressions *demonstrate* that his definition of foreclosure is appropriate. He finds [REDACTED] [REDACTED] [REDACTED]. SR1 ¶186; SR2 ¶36. That mathematical relationship offers powerful support for his approach.

Zuffa offers no alternative explanation as to why its Fighter Wage Share dropped as its Foreclosure Share rose. Zuffa fails to identify a variable that correlates with the percentage of Fighters subject to its Exclusive Contracts and that explains variations in its Fighter Wage Share. Further, even if _____ criticism did not undermine plaintiffs’ expert’s analysis, in part, because “[d]efendants have not identif[ied] a single omitted variable, or show[n] how adding one would change the results”); *In re Egg Products Antitrust Litig.*, 81 F. Supp. 3d 412, 431-32, 435 (E.D. Pa. 2015) (rejecting challenge to potentially relevant explanatory variable in regression where defense expert did not provide data showing how other factors could have been controlled for).

1 Zuffa did offer such a variable, its challenge would go to the weight of Dr. Singer's expert opinion, not
 2 its admissibility, particularly because Zuffa does not show, as it must, that introducing an omitted
 3 variable would change the results of Dr. Singer's analysis. *See supra* V.A.4 (discussing *Bazemore*,
 4 *High-Tech*, and other cases). The only potential variable Zuffa discusses is a "choice of law" clause, SD
 5 at 20, but Zuffa does not even suggest a "choice of law" clause *could* foreclose competition and thereby
 6 suppress Wage Share. In contrast, there is a long tradition in economic theory and antitrust
 7 jurisprudence recognizing exclusive contracts (a) can hamper competition and thereby affect prices,
 8 and (b) enhance the power to affect prices by increasing Foreclosure Share. *See, e.g., supra* at 13, n.22
 9 (citing authorities).

10 The second way that Dr. Singer establishes the propriety of using Zuffa's 30-month Exclusive
 11 Contracts to measure foreclosure is by comparing that contract duration with the career length of a
 12 typical MMA Fighter. Dr. Singer shows that [REDACTED]
 13 [REDACTED]. SR2 ¶¶64 & Table 1. [REDACTED]
 14 [REDACTED], SR1
 15 ¶¶99-100, 106, 108-111, 127; SR2 ¶24—[REDACTED]
 16 [REDACTED]. SR2 ¶¶64 & Table 1. An exclusive contract that lasts for 30-
 17 months—2 ½ years—therefore has a powerful exclusionary effect (even putting aside the various ways
 18 in which Zuffa's contracts *in fact* continue as long as Zuffa so desires, *e.g.*, [REDACTED]
 19 [REDACTED]). *Id.*; ZR1 ¶¶12-22. [REDACTED]
 20 [REDACTED]
 21 [REDACTED], SR2 ¶¶64-66,⁵⁰ a result

22
 23 ⁵⁰

24 [REDACTED]
 25 [REDACTED]. SR2 ¶64.
 26 [REDACTED]
 27 [REDACTED]
 28 [REDACTED]. *Id.* ¶¶64-65.

1 that Dr. Singer's regressions confirm. SR1 ¶186.

2 The third way Dr. Singer shows that Zuffa's 30-month contracts foreclosed competition is
 3 documentary evidence, including from Zuffa itself, its investors, and other market actors. A 2009
 4 Deutsche Bank Report, for example, noted [REDACTED]
 5 [REDACTED]
 6 [REDACTED] SR1 ¶159 (quoting CD, Ex. 35 (ZUF-000162329) at 347). Similarly, a 2014
 7 Moody's Credit Opinion cited [REDACTED]
 8 [REDACTED] SR1 ¶159 (quoting CD2, Ex. 65 (ZFL-1081154) at 54). Indeed, Zuffa itself
 9 drafted text for Deutsche Bank for a 2013 debt-offering prospectus that admitted, [REDACTED]
 10 [REDACTED]
 11 SR1 ¶160 (quoting CD2, Ex. 63 (ZFL-1055607) at 613). When announcing an upgrade in Zuffa's rating
 12 outlook in 2010, Moody's noted [REDACTED]
 13 [REDACTED] SR1 ¶160 (quoting CD2, Ex. 80 (Moody's Investors Service,
 14 "Announcement: Moody's Changed Zuffa LLC's (d/b/a Ultimate Fighting Championship or UFC)
 15 Rating Outlook to Positive from Stable," (Dec. 1, 2010)). Further, Zuffa spoke internally of [REDACTED]
 16 [REDACTED]
 17 [REDACTED]" SR1 ¶162 (quoting CD2, Ex. 67 (ZFL-1872579); CD2, Ex. 69
 18 (ZFL-2497585); CD2, Ex. 70 (ZFL-2536695)). Dr. Singer cites this and copious additional evidence.
 19 *Id.* ¶¶159-162. The notion that Dr. Singer lacked evidence that Zuffa's 30-month, Exclusive Contracts
 20 foreclosed competition is irreconcilable with the record.

21 Zuffa offers a few additional arguments. In a parenthetical and footnote it suggests—but does
 22 not assert—that 30-month exclusive contracts are too short to be anticompetitive under case law. SD at
 23 21. Zuffa is wrong. There is no set minimum contract length for an exclusive dealing claim, much less
 24 does case law hold a contract of thirty months is too short. *See* PHILLIP E. AREEDA & HERBERT
 25 HOVENKAMP, XI ANTITRUST LAW ¶1821(d)(3) (contracts longer than one year can be anticompetitive).
 26
 27
 28

1 The cases Zuffa cites in a footnote do not hold otherwise. SD at 21, n.11.⁵¹ In the Ninth Circuit in
 2 particular, the test is whether Zuffa's Exclusive Contracts were in fact able to foreclose a substantial
 3 share of the market and thereby cause anticompetitive harm—and, as discussed *supra* at III, Dr. Singer
 4 has shown they were. *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 326, 329 (1961) (“practical
 5 effect” of agreement is what matters in exclusive dealing case and party with market power policed
 6 more strictly); *Twin City*, 676 F.2d at 1302-03 (relevant question in exclusive dealing case is pragmatic:
 7 whether defendant's exclusive contract in fact caused anticompetitive harm); *Pro Search Plus, LLC v.*
 8 *VFM Leonardo, Inc.*, 2013 U.S. Dist. LEXIS 169856, at *14-15 (C.D. Cal. Dec. 2, 2013) (what is
 9 important is “the effect . . . in the real world”) (quotation omitted); *id.* (“economic realities rather than a
 10 formalistic approach must govern review of antitrust activity”) (quotation omitted). Indeed, the
 11 practical effect of contracts needs to be exclusionary—but the express terms need not be, much less for
 12 more than 30 months. *Pro Search Plus*, 2013 U.S. Dist. LEXIS 169856, at *14-15 (citing *ZF Meritor*,
 13 696 F.3d at 270). Moreover, as explained in Plaintiffs' motion for class certification, as a practical
 14 matter the exclusive negotiation and right to match clauses allowed Zuffa to extend their contracts *in*
 15 *perpetuity*. See Class Mot. at 9 (citing evidence).⁵²

17 ⁵¹ *Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc.*, 789 F. Supp. 2d 1201, 1203, 1212
 18 (C.D. Cal. 2011), did not hold—as Zuffa implies—that exclusive contracts of three to five years are not
 19 anticompetitive, but merely held instead that the plaintiff could not admit evidence of the defendants'
 20 legal conduct to establish the defendant's anticompetitive intent with regard to its exclusive dealing.
 21 Similarly, *Woman's Clinic, Inc. v. St. John's Health Sys., Inc.*, 252 F. Supp. 2d 857, 870 (W.D. Mo.
 22 2002), granted summary judgment against plaintiffs under federal antitrust law not because five-year
 23 exclusive contracts were too short to foreclose competition, but because plaintiffs had not established
 24 market power or defined a relevant market. *Indeck Energy Servs., Inc. v. Consumers Energy Co.*, 250
 25 F.3d 972, 974-75 (6th Cir. 2000), affirmed summary judgment based on a lack of antitrust standing
 26 because the plaintiff had failed to show harm to competition, not because exclusive contracts of five to
 27 ten years are necessarily too short to support an exclusive dealing claim. *Spinelli v. Nat'l Football*
 28 *League*, 96 F. Supp. 3d 81, 117-118 (S.D.N.Y. 2015), granted a motion to dismiss because the contracts
 at issue were not exclusive and because they were the subject of open bidding when they terminated—
 neither of which is true here—not because three-year exclusive contracts are too short to foreclose
 competition.

⁵² Zuffa also falsely implies that Dr. Singer's testimony has been excluded in regard to issues related to
 foreclosure. SD at 22-23. Although Zuffa obscures the point, *Cephalon* and *Apotex* were two stages of
 the same case, and the opinions excluded only small portions of his extensive expert testimony, none of
 which had to do with foreclosure. 2015 WL 12645766, at *5-6; 321 F.R.D. at 237. Further, as noted

1 Zuffa makes a grab bag of other unpersuasive points. It implies that it is a problem for Dr.
 2 Singer's theory that Zuffa could have a high market share and a low Foreclosure Share. SD at 20-21. It
 3 is not. Even if Zuffa had a high market share, without its long-term, Exclusive Contracts with Fighters,
 4 Zuffa would *not* have foreclosed competition and, as Dr. Singer's impact regressions show, [REDACTED]
 5 [REDACTED]. SR2 ¶¶191-197. Zuffa also appears to criticize Dr. Singer for
 6 refraining from drawing any *legal* conclusions about permissible contract length, *id.* at 21 (while also,
 7 inconsistently, implying he has improperly drawn legal conclusions in past cases, *id.* at 22). Dr. Singer
 8 is right not to draw *legal* conclusions. Instead, he properly notes that, as a matter of *economics*, Zuffa's
 9 30-month contracts foreclosed competition and suppressed Fighter Wage Share, and that if Zuffa's
 10 contract lengths were reduced enough not to be anticompetitive—Dr. Singer opines [REDACTED]
 11 [REDACTED], SR2 ¶¶191-195—then
 12 Fighter Wage Share would increase. However, he properly recognizes the finder of fact determines how
 13 long exclusive contracts can be without violating the law.⁵³

14 C. Dr. Singer's Inclusion of Strikeforce Data in his Regressions Is Proper

15 Zuffa claims Dr. Singer should not have included Strikeforce data in his regressions. SD 23.
 16 Zuffa is wrong. Strikeforce was an MMA promoter, operated in the same market as Zuffa, and offered a
 17 valuable baseline because, unlike Zuffa, Strikeforce lacked significant market power. SR2 ¶¶77-78.

18 _____
 19 above, the courts did not exclude his testimony in either *In re Fla. Cement & Concrete Antitrust Litig.*,
 20 278 F.R.D. 674 (S.D. Fla. 2012), SD at 22 (*nothing excluded*; court disagreed with Dr. Singer's "pass
 21 through" analysis in indirect purchaser case) or *Mazda v. Carfax, Inc.*, 2016 WL 7231941 (S.D.N.Y.
 22 Dec. 9, 2016), SD at 22 (*nothing excluded*; court disagreed at summary judgment with evidentiary basis
 23 for one of his opinions), and *Mazda* is on appeal.

24 ⁵³ Zuffa also suggests that Dr. Singer "admitted that his injury and damages estimates would be the
 25 same if the court ruled that exclusive contracts of two years or less were legal because the court's
 26 definition would automatically be the 'foreclosure share' in his regression analysis." SD at 21. That
 27 point is incoherent. Dr. Singer did not make or admit it. The permissible length of an exclusive contract
 28 and Foreclosure Share are distinct concepts and are not interchangeable with one another. Moreover,
 what the impact regressions show is that Zuffa's contracts *as they currently exist* are anticompetitive.
 The point of the analysis is to compare the current conduct to a but-for world in which Zuffa's contracts
 are no longer substantially restricting Fighter mobility. There is no basis in the record to conclude that
 if Zuffa merely imposed the same contracts ([REDACTED])
 and engaged in the same Scheme, but simply [REDACTED] that that would
 erase the anticompetitive effects. Thus, that is not a plausible but-for world scenario, and his model
 need not account for it.

1 Zuffa's own expert, Dr. Topel, admitted that Strikeforce is [REDACTED]
 2 [REDACTED] SR2 ¶¶77 & n. 276 (citing TR1 ¶¶287), and used Strikeforce as a competitive benchmark.
 3 SR2 ¶¶77 & n. 278 (citing TR1 ¶¶286-288).

4 Nonetheless, Dr. Topel [REDACTED]
 5 [REDACTED]
 6 [REDACTED]. TR1 ¶¶151-156. As Dr. Singer explains, however, Dr. Topel used the Chow
 7 test improperly and, when applied correctly, the Chow test *supports* including the Strikeforce data: that
 8 data is in material ways consistent with the Zuffa data and, when controlling for the differences as Dr.
 9 Singer did, *strengthens* his regressions. SR2 ¶¶79-87. [REDACTED]

10 [REDACTED]. *Id.* ¶87. Zuffa addresses
 11 none of these points. It cites Dr. Topel's original opinion but ignores Dr. Singer's response. SD at 23.⁵⁴

12 Zuffa's lawyers also speculate, without citing expert testimony, that Dr. Singer's reliance on
 13 Strikeforce data is inappropriate because he treats Strikeforce's pre-acquisition contracts—*i.e.*, its
 14 contracts from before it was acquired by Zuffa—as not contributing to foreclosure but then treats
 15 Strikeforce's post-acquisition contracts—*i.e.*, its contracts after most of its Fighters became *part of*
 16 *Zuffa*—as contributing to foreclosure. SD at 23. But that *is* appropriate. While Dr. Singer shows *Zuffa*
 17 foreclosed competition through its contracts, no expert has suggested that *Strikeforce* had the market
 18 power to do so.⁵⁵ Moreover, Dr. Singer performs a standard statistical test to assess whether Zuffa's
 19 Foreclosure Share affected Fighter Wage Share *at Strikeforce* and concludes it did not, showing his
 20 approach to be appropriate. SR1 ¶¶182-183 & n.454; SR2 ¶75 & n. 274; *id.* ¶84. Zuffa's economists
 21 have not challenged that finding.

22 Zuffa also complains that when former Strikeforce Fighters signed with Zuffa (after the
 23

24 ⁵⁴ Dr. Topel's unauthorized sur-rebuttal report makes new arguments in response to Dr. Singer's reply
 25 report. Zuffa has failed to cite or raise those new arguments in its moving papers, and should not be
 26 permitted to make them for the first time on reply. *Intrade Indus., Inc. v. Foreign Cargo Mgmt. Corp.*,
 2008 WL 5397495, at *2 (E.D. Cal. 2008). Further, the new arguments are incorrect, as Dr. Singer
 explains in his supplemental report. SR3 ¶¶5, 10-12, 17, 22, 28, 39, 42-45, 50-51.

27 ⁵⁵ See CD2, Ex. 57 (Topel Dep. 2) at 303:24-304:7 ("Q. . . in your view Strikeforce doesn't have
 28 market power . . . ? A. That's my view."); *id.* at 370:12-15 ("Q. Did Strikeforce have a significant share
 of the input or output markets at the time it was taken over by Zuffa? A. Evidently not.").

1 acquisition) they received a pay increase measured in dollars, yet Dr. Singer finds they were paid a less
 2 competitive amount measured in Wage Share. SD at 23. However, that too is proper. As Zuffa itself
 3 admits, “the event revenues for Zuffa events are . . . considerably higher than [for] Strikeforce events.”
 4 SD at 23. Zuffa had a higher-caliber pool of Fighters, creating additional revenue-generating potential
 5 for these Fighters. That means that if Zuffa did not have monopsony power, it would have had to pay
 6 the former Strikeforce Fighters “considerably” more—not just slightly more—than did Strikeforce.
 7 SR2 ¶75. Zuffa’s argument to the contrary not only lacks a basis in expert testimony but also is a
 8 reprise of its incorrect claim that Dr. Singer should have used wage level instead of Wage Share.

9 **D. Dr. Singer’s Opinions “Related to Damages Analysis” Should Be Admitted**

10 Zuffa moves to exclude Dr. Singer’s opinions “related to damages analysis.” SD at 24-28. If
 11 Plaintiffs establish that Zuffa violated federal antitrust laws, they must then show that Zuffa’s illegal
 12 conduct caused antitrust injury (impact) and must calculate the aggregate damages to Class members.
 13 Dr. Singer offers expert economic opinions on these issues. As discussed above, among other
 14 techniques, he uses a regression to show that if Zuffa’s illegal Foreclosure Share had *decreased* to legal
 15 levels, its Fighters’ Wage Share would have *increased* dramatically. That analysis enables him: (1) to
 16 opine that Zuffa’s illegal foreclosure of the market caused impact—it suppressed Fighter pay—and (2)
 17 to calculate the resulting aggregate damages.

18 **1. Dr. Singer’s Analysis Is Sufficiently Specific about the But-For World.**

19 Zuffa’s first complaint is that Dr. Singer allegedly does not specify what Zuffa would have done
 20 differently in the but-for world that would have caused a reduction in Foreclosure Share. SD at 24-26.
 21 That argument fails as a matter of law, logic, and evidence.

22 As a matter of law, once plaintiffs establish an antitrust violation, the Supreme Court has held
 23 that the burden of proving antitrust injury is “lightened” because: “The vagaries of the marketplace
 24 usually deny us sure knowledge of what plaintiff’s situation would have been in the absence of the
 25 defendant’s antitrust violation.” *J. Truett Payne Co., Inc. v. Chrysler Motors Corp.*, 451 U.S. 557, 566,
 26 568 (1981). Similarly, the Supreme Court long ago held in an antitrust case that “the wrongdoer may
 27 not object to the plaintiff’s reasonable estimate of *the cause of injury and of its amount*, supported by
 28

1 the evidence, because it is not based on more accurate data which the wrongdoer's misconduct has
 2 rendered unavailable." *Bigelow v. RKO Radio Pictures, Inc.*, 327 U.S. 251, 265 (1946) (emphasis
 3 added). If Plaintiffs establish an antitrust violation, uncertainty about causation of injury and the
 4 amount of damages, then, should be resolved in favor of Plaintiffs, the victims, not in favor of Zuffa,
 5 the wrongdoer.⁵⁶

6 Zuffa's criticism is also incorrect as a matter of economic logic. It is striking in this regard that
 7 Zuffa does not cite any of its experts in claiming that Dr. Singer's "but-for" world is insufficiently
 8 specific. Zuffa's omission is fatal. Attorney speculation is not evidence and is insufficient to exclude
 9 expert testimony. *See supra* at 14. In any case, Dr. Singer's regression analysis shows that Zuffa's
 10 Foreclosure Share has an inverse relationship with Wage Share, all else remaining the same. SR1
 11 ¶¶153, 250, 252; SR2 ¶188. In other words, as Zuffa's Foreclosure Share went *up*, Wage Share went
 12 *down*, controlling for hundreds of other variables. As a result, all that Dr. Singer has to specify about
 13 his but-for world to establish causation of injury and to calculate damages is that Zuffa's Foreclosure
 14 Share would decrease without the Scheme (which it would, by definition)—and thus Fighter Wage
 15 Share would increase. SR2 ¶¶188, 197.

16 Although further specificity about the "but-for" world is not necessary, Dr. Singer nonetheless
 17 provides additional details about how the market would look without Zuffa's illegal Scheme. Based on
 18

19 ⁵⁶ *See also Comcast Corp. v. Behrend*, 569 U.S. 27, 35 (2013) (damages "[c]alculations need not be
 20 exact"); *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 114 n.9 (1969) ("a plaintiff need
 21 not exhaust all possible alternative sources of injury in fulfilling his burden of proving compensable
 22 injury"); *id.* at 123 (courts should "observe the practical limits of the burden of proof" because
 23 "damage issues in these cases are rarely susceptible of the kind of concrete, detailed proof of injury
 24 which is available in other contexts"); *LePage's, Inc. v. 3M*, 324 F.3d 141, 166 (3d Cir. 2002) ("in
 25 constructing a hypothetical world free of the defendants' exclusionary activities, the plaintiffs are given
 26 some latitude in calculating damages, so long as their theory is not wholly speculative"); *In re*
 27 *Microsoft Corp. Antitrust Litig.*, 699 F. Supp. 2d 730, 748 (D. Md. 2010) (quoting *U.S. v. Microsoft*
 28 *Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001)), *rev'd on other grounds*, 429 F. App'x 254 (4th Cir. 2011)
 ("courts should be reluctant to demand too much certainty in proving that such conduct caused
 anticompetitive harm because [t]o some degree, the defendant is made to suffer the uncertain
 consequences of its own undesirable conduct"); *In re Asacol Antitrust Litig.*, 2017 WL 5196381, at
 *32 (D. Mass. Nov. 9, 2007) (quoting *Bigelow*, 327 U.S. at 264) (in regard to causation and amount of
 damages "in antitrust suits, 'juries are allowed to act on probable and inferential as well as (upon)
 direct and positive proof'").

1 Zuffa’s conduct when it had less market power than it currently does, and on the conduct of other
 2 MMA promoters with less market power than Zuffa, Dr. Singer opines, for example, that in the “but-
 3 for” world, [REDACTED], SR2 ¶¶191-93, [REDACTED]
 4 [REDACTED]” *id.* ¶194, [REDACTED]
 5 [REDACTED], *id.* ¶195, and different MMA promoters would
 6 allow their Fighters to compete against one another to stage popular Bouts. *Id.* ¶196. As a result, MMA
 7 promoters would compete for top talent, driving up Fighter compensation closer to the value the
 8 Fighters provide, as well as increasing total Event Revenues and strengthening MMA in general. *Id.*
 9 ¶197 (discussing the admissions of Dr. Oyer, Zuffa’s economist, that enhanced competition increases
 10 worker compensation and generates greater overall revenue) (citing CD2, Ex. 55 (Oyer Dep.) at
 11 193:19-22, 200:20-201:3, 201:17-202:3). Zuffa ignores all of this.⁵⁷

12 2. Dr. Singer’s “But-For” World Is Rational.

13 Zuffa also argues that Dr. Singer “assumes an irrational economic world.” SD at 26. The basis
 14 for its position is that Dr. Singer’s “but-for” world assumes “a vastly different market structure than *any*
 15 successful promoter uses **today**.” *Id.* at 26 (*italics in original; bold added*). But once Plaintiffs have
 16 established an antitrust violation, they have shown that Zuffa’s illegal conduct has corrupted the market
 17 *today*. The “but-for” world, by definition, is one in which Zuffa would *not* engage in that illegal
 18 conduct. So it does not matter that Zuffa’s contracts *today*, for example, have a variety of
 19 anticompetitive provisions. Nor is it appropriate to assume that smaller MMA promoters—with less
 20 market power—engage in the same practices *today* that they would if the market were competitive. *See*
 21

22 ⁵⁷ Instead, Zuffa cites *In re Pharmacy Benefit Managers Antitrust Litig.*, 2017 WL 275398, at *20 (E.D.
 23 Pa. Jan. 18, 2017), for the unexceptional proposition that a plaintiff’s theory of impact should match its
 24 damages model. SD at 26. Dr. Singer’s does. His analysis of impact and damages both measure only
 25 the effect of foreclosure from Zuffa’s exclusionary contracts. SR2 ¶188. To the extent other contractual
 26 provisions or conduct may have been illegal and contributed to impact and additional damages, Dr.
 27 Singer’s analysis is conservative. *Id.* For the same reason, Dr. Singer’s testimony satisfies *In re Rail*
 28 *Freight Fuel Surcharge Antitrust Litig.*, 2017 WL 5311533, at * 58 (D.D.C. Nov. 13, 2017), an opinion
 that specifically rejects efforts, like Zuffa’s, to force plaintiffs to separate out the parts of a single
 scheme. *See id.* at *56 (“[T]he character and effect of a conspiracy are not to be judged by
 dismembering it and viewing its separate parts, but only by looking at it as a whole.” *Cont’l Ore Co. v.*
Union Carbide & Carbon Corp., 370 U.S. 690, 699[] (1962) (citation omitted).”).

SR2 ¶¶235-37 (explaining when a dominant firm engages in anticompetitive conduct, other firms often are incentivized to imitate it).

Moreover, Dr. Singer bases his “but-for” world on ample evidence. As he explains: (1) [REDACTED] [REDACTED] *id.* ¶191; (2) [REDACTED] [REDACTED] [REDACTED] *id.* ¶194; and (3) smaller MMA promoters allow their Fighters to enter Bouts with one another, Zuffa expressed interest in doing so before it increased its market power, and Zuffa did engage in co-promotion of a boxing match between Floyd Mayweather and Conor McGregor because it lacked market power in the boxing market. *Id.* ¶¶196, 222-26. That evidence provides a solid basis for Dr. Singer’s testimony about what would have occurred in the “but-for” world. Zuffa offers *no* expert opinion or admissible evidence to the contrary.⁵⁸

E. Dr. Singer’s Strikeforce and Bellator Benchmarks Are Appropriate

Zuffa criticizes Dr. Singer’s alternate damages models that use Strikeforce and Bellator as benchmarks. SD at 27. Zuffa claims that it is different from those MMA promoters because it is larger and that Dr. Singer fails to take that difference into account. Untrue. By relying on *Wage Share*, Dr. Singer’s approach automatically adjusts for size. Fighter compensation is pegged to the revenues that

⁵⁸ Zuffa’s reliance on *Allied Orthopedic Appliances, Inc. v. Tyco Health Care Grp.*, 592 F.3d 991, 996 (9th Cir. 2010), SD at 26, is unavailing because (1) the language Zuffa cites addresses when an exclusive agreement is *illegal*, not how a “but-for” world should be defined after plaintiffs have *already shown* such an agreement is illegal, *id.*, and (2) it did not involve an exclusive contract but rather only discounts that encouraged loyalty. *Id.* Similarly, *In re Online DVD Rental Antitrust Litig.*, 2011 WL 5883772, at *15 (N.D. Cal. Nov. 23, 2011), *aff’d sub nom. In re Online DVD-Rental Antitrust Litig.*, 779 F.3d 914 (9th Cir. 2015), SD at 24, 26, involved (1) summary judgment, not *Daubert*, and (2) the court criticized plaintiffs’ expert for ignoring how the market functioned *before* the alleged unlawful conduct, whereas Zuffa claims Dr. Singer must treat the market *during* the illegal conduct as if it were competitive.

None of the other cases Zuffa cites supports its position. *Concord Boat Corp. v. Brunswick*, 207 F.3d 1039, 1055 (8th Cir. 2000), SD at 24, merely notes that the district court had required plaintiffs to explain how the “‘but for’ market” would be different without the illegal conduct; it did not suggest how specific the plaintiffs had to be. Similarly, *Murphy Tugboat Co. v. Crowley*, 658 F.2d 1256, 1262 (9th Cir. 1981), SD 24, merely holds that economical rationality should be presumed, which Dr. Singer does.

1 an event generates, so that an MMA promoter that generates less revenue—is smaller—is expected to
 2 pay its Fighters less. It is Zuffa’s use of wage *levels* that fails to properly take into account the size of
 3 MMA promoters. SR2 ¶¶110-20 (criticizing Zuffa’s economists for failing to take into account Event
 4 Revenues at some points, and for taking those revenues into account improperly at others); MR1 ¶¶29-
 5 30 (same).

6 Moreover, Zuffa’s own expert, Dr. Oyer, suggested that, all things equal, [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED] OR1 ¶58; CD2, Ex. 55
 10 (Oyer Dep.) at 171:4-11. So Zuffa’s own economist suggested [REDACTED]
 11 [REDACTED]—that is, in a competitive market Zuffa [REDACTED]
 12 [REDACTED]. Against this evidence Zuffa offers—nothing.⁵⁹

13 Finally, even if Zuffa had provided credible reasons to reject Dr. Singer’s yardsticks—it has
 14 not—that would affect the weight of his testimony, not its admissibility. *In re Blood Reagent Antitrust*
 15 *Litig.*, 2015 WL 6123211, at *12 (E.D. Pa. Oct. 19, 2015) (explaining that challenges to expert’s
 16 benchmark implicated weight testimony should be given, not admissibility, and denying request to
 17 exclude expert testimony); *In re Mushroom Direct Purchaser Antitrust Litig.*, 2015 WL 5767415, at *6-
 18 14 (E.D. Pa. July 29, 2015) (rejecting *Daubert* challenges to expert’s benchmark and regression
 19 analysis); *see also Fleischman v. Albany Med. Ctr.*, 728 F. Supp. 2d 130, 150 (N.D.N.Y. 2010)
 20 (“Differences in expert opinion as to which benchmark is more reliable does not render [expert’s]
 21 opinions unreliable.”).

22 **F. Dr. Singer’s Identity Class Damages Calculation Is Reliable and Proper**

23 Zuffa argues that Dr. Singer’s damages calculation for the Identity Class is unreliable and not
 24

25 ⁵⁹ Nor does Zuffa’s position find support in its *ad hominem* attack on Dr. Singer based on an irrelevant
 26 opinion in *In re Cox Enterprises, Inc.*, 2011 WL 6826813, at *16. In *Cox*, the court did not exclude Dr.
 27 Singer’s testimony under *Daubert*—in fact it praised him: “Dr. Singer is a well-qualified economist,
 28 which Defendant does not dispute.” *Id.* at *15. *Cox* did not reach the *Daubert* issue because it found—
 in evaluating class certification—that common issues did not predominate, rendering admissibility
 under *Daubert* moot. *Id.* at *15-16.

expert testimony. SD at 27-28. It claims that Dr. Singer merely “transcribe[d] a dollar value from a document which,” Zuffa asserts, “is not a valid way to assess impact or calculate damages.” *Id.* In fact, Dr. Singer offered an economic explanation for why actual payments Zuffa made in the real world for identity rights serve as a conservative benchmark for how much it would have paid for identity rights in the “but-for” world if it lacked monopsony power (the yardsticks are conservative because, absent the Scheme, Zuffa likely would have paid more than it did in the benchmark). SR1 ¶¶238-240; SR2 ¶¶169-170. Zuffa identifies no flaw in Dr. Singer’s reasoning and, again, cites no evidence to contradict it. Instead, it cites an inapposite case in which an expert “simply adopted the opinions of others and performed grade-school arithmetic counsel can do on an easel.” SD at 27-28 (citing *Waymo LLC v. Uber Techs., Inc.*, 2017 WL 5148390, at * 5 (N.D. Cal. Nov. 6, 2017)). But Dr. Singer did *not* rely on the testimony of any other expert, instead he exercised *expert economic judgment* in determining whether the amount Zuffa paid in the real world for comparable rights is an appropriate benchmark for damages. Dr. Singer’s opinion is reliable.

G. Dr. Singer’s Analyses of Market Power Are Reliable

A central question in this case is whether Zuffa, through its Scheme, had the power *as a buyer* to suppress the amounts it paid for the services of its Fighters (sellers) below competitive levels. That form of *market* power is called *monopsony* power. Dr. Singer shows in two ways that Zuffa had monopsony power. First, he offers direct evidence—including the impact regressions themselves—demonstrating that Zuffa used its Exclusive Contracts to foreclose potential competition and suppress its Fighters’ Wage Share from [REDACTED] (where it would have been absent the Scheme) [REDACTED]. Second, he defines a relevant market for MMA Fighter Services and shows Zuffa controlled a high percentage of it—[REDACTED]—confirming Zuffa *could* do what the direct evidence shows it *did* do: suppress pay below competitive levels. SR1 ¶¶99, 129; SR2 ¶¶19, 21, 26.

A subsidiary question is whether Zuffa *as a seller* had the power, for example, to artificially inflate prices for MMA Events (through pay-per-view and the like). That form of *market* power is

called *monopoly* power.⁶⁰ Dr. Singer finds Zuffa also had monopoly power. Plaintiffs seek to recover only for under-compensation, so Zuffa’s *monopoly* power is not relevant to their theory of injury, but only to show *additional* anticompetitive effects flowing from the Scheme.

1. Dr. Singer Uses Direct and Indirect Evidence to Show Market Power.

Market power can be proven directly—by showing the ability to control pay or price—or indirectly—by showing a significant share of a relevant market. *Rebel Oil*, 51 F.3d at 1434; *Geneva Pharm. Tech. Corp. v. Barr Labs. Inc.*, 386 F.3d 485, 500 (2d Cir. 2004).⁶¹ Either suffices. *Rebel Oil*, 51 F.3d at 1434. Dr. Singer uses well-established direct *and* indirect methods to show that Zuffa had sufficient market power both to suppress pay and to increase prices. Given that a key issue here is whether Zuffa *could* suppress Fighter pay by foreclosing rivals, direct evidence that it *did just that* is enough to satisfy the relevant market power test. *Id.*; SR1 ¶¶93.

2. Dr. Singer’s Direct Proof of Market Power Is Reliable.

Dr. Singer demonstrates Zuffa’s monopsony power directly with empirical proof that it suppressed Fighter pay below competitive levels, including, *inter alia*: (1) impact regressions, showing that the more Fighters it controlled, the lower its Fighters’ Wage Share was, *supra* at 10; (2) evidence that Zuffa successfully imposed [REDACTED], SR1 ¶¶191-92; SR2 ¶¶37, 41; and, (3) additional evidence that Zuffa [REDACTED]. SR1 ¶¶189-190. The ability to suppress pay and reduce labor mobility is direct

⁶⁰ *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966) (market power is the “power to control prices or exclude competition”) (internal quotes and citation omitted); *see also Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., Inc.*, 549 U.S. 312, 322 (2007) (“similar legal standards should apply to claims of monopolization and to claims of monopsonization”).

⁶¹ Zuffa’s assertion is incorrect that market definition is “indispensable to a monopolization claim.” SD at 28 (citing *Morgan, Strand, Wheeler & Biggs v. Radiology, Ltd.*, 924 F.2d 1484, 1491 (9th Cir. 1991); *Cont’l T.V. Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 53 n.21 (1977)). Neither case discusses direct evidence and both cases predate *Rebel Oil*. Market definition is necessary only for *indirect* proof of market power. *PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 107-08 (2d Cir. 2002) (where there is direct evidence, a “relevant market definition is not a necessary component of a monopolization claim”).

evidence of monopsony power.⁶² Dr. Singer also demonstrates Zuffa's monopoly power directly with evidence that Zuffa [REDACTED] SR2 ¶¶44; *see also* SR1 ¶¶147-48.⁶³ Reduced output and increased price constitute direct evidence of monopoly power. *See, supra*, nn.23 & 62.

Zuffa questions Dr. Singer's reliance on his findings that Zuffa (1) decreased Fighter pay, (2) suppressed PPV output, and (3) increased PPV prices because Zuffa claims he did not rule out causes other than market power. SD at 35. But Dr. Singer's primary direct proof of market power are his impact *regressions*, which [REDACTED] and show Zuffa's foreclosure of the market suppressed compensation below competitive levels. *Supra* at 25. Zuffa identifies no variable that would change his result. *See supra* V.A.4 (the party seeking exclusion must identify missing variable that alters analysis result). Zuffa contests Dr. Singer's finding that Zuffa's sponsorship tax is direct evidence of market power. SD at 38. But, as Dr. Singer explains, [REDACTED] [REDACTED] SR1 ¶¶191-92 & nn.469-72; SR2 ¶41. Successfully implementing a profitable reduction in compensation is direct evidence of monopsony power because, without it, Fighters would have left Zuffa as their income fell. *Id.* Zuffa offers only vague speculation that other factors could have offset Fighter pay losses from this tax. SD at 38. But speculation without evidence is insufficient to support a *Daubert* motion. Further, disputes about the factual underpinnings of an expert opinion are not grounds for exclusion.⁶⁴ And, though Zuffa implies otherwise, regression analyses are not the only

⁶² *E.g., In re High-Tech*, 856 F. Supp. 2d at 1122 (allegation that "Defendants succeeded in lowering compensation and mobility of their employees below what would have prevailed in a lawful and properly functioning market" is direct evidence that "Defendants had the market power to do" so).

⁶³ Dr. Singer also directly demonstrates monopoly power by showing that Zuffa [REDACTED] SR1 ¶¶203-07 & Tables 4A-4C; SR2 ¶¶42, 47-49; *see also* SR1 ¶194 & nn.478-83. ***Zuffa does not challenge that opinion.*** Indeed, although the section heading refers to Dr. Singer's finding that Zuffa reduced MMA events overall, the text of the section discusses *only* the reduction in the number of Zuffa PPV events. SD at 36.

⁶⁴ *See, e.g., Hangarter v. Provident Life and Acc. Ins. Co.*, 373 F.3d 998, 1017 n.14 (9th Cir. 2004) ("[T]he factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility and it is up to the opposing party to examine the factual basis for the opinion in cross-examination.")

admissible means of inferring causation.⁶⁵

Zuffa criticizes Dr. Singer’s findings that Zuffa suppressed PPV output and raised PPV prices because he does not rule out “*reduced* demand” as an explanation for lower output and, simultaneously, “*increased* demand” as an explanation for higher PPV prices. SD at 36, 37 (emphasis added). But those positions are inconsistent: changes in demand cannot simultaneously explain reduced output (which results from *decreased* demand) and higher prices (which result from *increased* demand); an explanation of both of those effects at the same time requires growing market power or an increase in costs, and the latter is ruled out by Zuffa’s own data. See SR2 ¶46.

Zuffa also claims Dr. Singer’s finding that Zuffa had the market power to reduce PPV event output between 2010 and 2015 did not account for Zuffa’s 2011 contract with Fox, which Zuffa claims “shifted more events to its broadcast partner.” SD at 36. But Zuffa’s only evidence of this supposed shift is a snippet of vague testimony about an unknown number of PPV events broadcast on Fox “a few times.” SD at 36.⁶⁶ Zuffa further trumpets that “the overall number of Zuffa events” has risen. SD at 36.

(quotation omitted)); *Giuliano v. Sandisk Corp.*, 2015 WL 10890654, at *8 (N.D. Cal. May 14, 2015) (“To the extent [defendant] challenges the factual basis of [the expert’s] direct evidence opinion, questions regarding the evidence relied upon by [the expert] go to the weight, not the admissibility of his opinion.”).

⁶⁵ *Lidoderm*, 2017 WL 679367, at *10 (economist reliably demonstrated causation using internal documents and studies, but no regression); *United States v. Celgene Corp.*, 226 F. Supp. 3d 1032, 1043–44 (C.D. Cal. 2016) (rejecting argument that “even if [plaintiff] can establish causation based on aggregate evidence, she must at least present a regression analysis or other statistical model that is capable of controlling for independent factors”); *Dover v. British Airways, PLC (UK)*, 254 F. Supp. 3d 455, 461 (E.D.N.Y. 2017) (refusing to exclude non-regression based opinion as unreliable: “Any arguable weakness in this methodology, or the possibility that relevant factors were omitted, goes to weight, not admissibility”); *In re Blood Reagents*, 2015 WL 6123211, at *11 (“*Daubert* does not mandate the use of . . . econometric tools [like regression].”).

⁶⁶ Dr. Singer also explains that it [REDACTED] . CD2, Ex. 52 (Singer Dep. 1) at 329:3-22. Without disputing that fact, Zuffa argues instead that an economist may not opine about motive. But assessing economic incentives is one of the central premises of economic analysis. See, e.g., AREEDA & HOVENKAMP, *supra* n.14, ¶309 (“economics is concerned with incentives . . . , and as a result it is often thought wise to treat people and firms as if they are rational actors”); *Dolphin Tours, Inc. v. Pacifico Creative Serv. Inc.*, 773 F.2d 1506, 1511 (9th Cir. 1985); *Murphy Tugboat*, 658 F.2d at 1262 (“economic rationality must be assumed for all competitors”). *In re Rezulin Products Liability Litigation*, 309 F. Supp. 2d 531, 547 (S.D.N.Y. 2004), SD at 36, is not contrary. It excluded speculation about what a regulator may have done with different information; not whether a firm was acting within its economic

But, as Dr. Singer points out, what matters is total output, not the output of any one firm,⁶⁷ and it is undisputed that the *total* output of Live MMA Events—whether measured by number of events or aggregate viewership—dropped substantially during the relevant period. *See* SR1 ¶¶205-07 & Figures 4A-4C; SR2 ¶¶47-49. Nothing explains that but Zuffa’s exercise of market power through the Scheme. *Id.*

Concerning Dr. Singer’s finding that Zuffa had the market power to profitably increase the residential PPV price, Zuffa argues that Dr. Singer uses different measurements that purportedly “conflict.” SD at 37 (citing Dr. Singer discussing [REDACTED]). But Dr. Singer just measures the same price hike in two ways: [REDACTED]
[REDACTED]. SR2 ¶45. So the figures are consistent. Further, Zuffa’s assertion that [REDACTED]
[REDACTED] is wrong and irrelevant. In fact, Zuffa [REDACTED],⁶⁸ [REDACTED]
[REDACTED]; the ability to raise prices (no matter the reason) profitably *is* market power. *See, e.g., AREEDA & HOVENKAMP, supra* n.14, ¶501 (“A defendant firm has market power if it can raise price without a total loss of sales.”).⁶⁹ In any event, a dispute about an expert opinion’s factual underpinnings is for the jury. *Hangarter*, 373 F.3d at 1017 n.14.⁷⁰

interests.

⁶⁷ *See, e.g., Procaps S.A. v. Patheon Inc.*, 141 F. Supp. 3d 1246, 1278 (S.D. Fla. 2015) (“Plaintiff must measure the magnitude of the actual adverse effects ‘by their impact on the market rather than by their impact on competitors’ and show that they are felt ‘marketwide’” (quoting *Spanish Broad. Sys. of Fla., Inc. v. Clear Channel Commc’ns, Inc.*, 376 F.3d 1065, 1071, 1074-75 & n.5 (11th Cir. 2004))).

⁶⁸ *See* SR1 ¶199, n.491 (collecting documents); *see also* CD2, Ex. 68 (ZFL-2279086) at 91 (Deutsche Bank: [REDACTED]).

⁶⁹ Zuffa cites *Craftsmen Limousine, Inc. v. Ford Motor Co.*, 363 F.3d 761, 777 (8th Cir. 2004), to support its assertion that Dr. Singer “assumes” that market power explains the PPV price increase. SD at 37. In *Craftsmen*, however, the expert was not assessing market power, but rather projecting a firm’s growth, and doing so without accounting for the effect of the entry or expansion of new competitors. *Id.* at 777. Dr. Singer, conversely, shows that Zuffa was able to raise price profitably, regardless of the competition.

⁷⁰ Zuffa misleadingly cites two cases in which it claims that Dr. Singer’s opinions were excluded for supposedly similar reasons. Zuffa claims that in *Jarrett*, 2014 WL 3735193, Dr. Singer “speculat[ed]

3. Dr. Singer Offers Reliable Indirect Proof of Market Power.

Dr. Singer also demonstrates market power with standard methods of indirect proof—*i.e.*, by defining a relevant market and computing Zuffa’s market share. *See Rebel Oil*, 51 F.3d at 1434. A relevant market includes products or services “that have reasonable interchangeability for the purposes for which they are produced—price, use, and qualities considered.” *Paladin Assocs. v. Montana Power Co.*, 328 F.3d 1145, 1163 (9th Cir. 2003) (citation omitted).⁷¹

Input Market: To evaluate whether Zuffa had sufficient monopsony power to suppress Fighter pay, Dr. Singer defines an “input” market consisting of buyers of MMA Fighter services. An input market is defined from the perspective of the sellers—here, the Fighters. It includes all reasonably interchangeable buyers (promotions) to which a seller (Fighter) would turn in the face of a pay decrease. *Todd v. Exxon Corp.*, 275 F.3d 191, 204 (2d Cir. 2001); SR1 ¶¶ 98-99. Dr. Singer’s method involves the standard iterative process, starting with the narrowest market and expanding until all (conceivably) reasonable substitutes are included. SR1 ¶¶ 99-119; *see, e.g., Hynix Semiconductor Inc. v. Rambus, Inc.*, 2008 WL 73689, at *3 (N.D. Cal. Jan. 5, 2008). Dr. Singer begins with the market for “Elite Professional MMA Fighter services.” Compl. ¶¶ 76, 90-94; *see also* SR1 ¶¶ 105-14, 134-40. He finds substantial evidence—including admissions of Zuffa’s top executives, internal documents, reports by investors and analysts, and financial data—that no MMA promoter is interchangeable with Zuffa from a Fighter’s perspective. *See, e.g.,* SR1 ¶¶ 131, 134-40 & nn.352, 358-86; SR2 ¶¶ 16-24, 26. As Dr. Singer observes, “even the most prominent non-Zuffa promoters do not have access to a sufficiently deep pool of talented Fighters to provide competitive matchups to advance a Zuffa Fighter’s career, thus making non-Zuffa MMA promoters an inadequate substitute.” SR1 ¶ 104.

regarding record evidence” resulting in his testimony being found inadmissible. SD at 36. Not so. *Jarrett* did not find Dr. Singer’s testimony inadmissible; it considered his testimony on the merits, and made a factual finding at summary judgment. *Id.* at *7. Zuffa also cites *Kamakahi*, 305 F.R.D. 164, referencing that in both cases, Dr. Singer used the phrase “natural experiment.” SD at 38. That is where the similarity ends. *Kamakahi* excluded Dr. Singer’s damages analysis because of the insufficiency of the available data. 305 F.R.D. at 180-82. No such data issue exists here.

⁷¹ “In defining a relevant market for Sherman Act purposes, the court must consider distinction in degree as well as kind.” *Twin City*, 676 F.2d at 1299 (citing *Int’l Boxing Club, Inc. v. United States*, 358 U.S. 242, 251 (1959); *Grinnell*, 384 U.S. 563).

However, to be conservative, Dr. Singer defines the market more broadly. His “Tracked” definition includes nine MMA promoters whose Fighters were tracked by an industry-accepted database called “FightMetric.” SR1 ¶109; CD2, Ex. 52 (Singer Dep. 1) at 296:17-297:9 (economic literature on the MMA industry frequently uses FightMetric data). Dr. Singer alternatively uses an even broader “Ranked” definition, which includes (1) all promoters in the Tracked definition, (2) all promoters with any Fighter ranked in a separate database (confusingly called “FightMatrix”) (which ranks Fighters 1 to 650 in each weight class across promotions), and (3) an additional promoter, ONE Championship, that operates in Asia. SR1 ¶110. Further, Dr. Singer defines an Input Submarket comprising the top 15 Fighters in any of the ten major MMA weight classes tracked in the USA Today/MMA Junkie rankings (the “Headliner” submarket). *Id.* ¶112.

Output Market: To determine whether Zuffa had sufficient monopoly power to raise consumer prices and reduce output, Dr. Singer defines an “output” market consisting of sellers of Live MMA Events. Dr. Singer includes in the Output Market those promoters with Fighters under contract who were in either the Input Market (however measured) or the Input Submarket. *Id.* ¶115. While finding that non-Zuffa promoters are “inferior substitutes from the perspective of audiences,” he conservatively includes several additional MMA promoters. *Id.* ¶119.

4. Zuffa’s Criticisms of Dr. Singer’s Relevant Markets.

Zuffa’s challenges to Dr. Singer’s relevant markets are all fatally deficient for one overarching reason: neither Zuffa nor any of its economists identifies a single promoter that Dr. Singer improperly excludes. *See Universal Surveillance Corp. v. Checkpoint Sys., Inc.*, 2015 WL 6082122, at *18-19 & n.10 (N.D. Ohio Sept. 30, 2015) (relevant market testimony admissible where defendant did not identify “a single significant market participant unaccounted for in [the expert’s] analysis”). Zuffa’s arguments are wrong for myriad other reasons as well.

a. Dr. Singer’s Relevant Input Market Definition Is Reliable.

Zuffa asserts that, in defining the input market, Dr. Singer mistakenly focuses on the identity of sellers (Fighters) rather than alternative buyers (promoters) to which Fighters would switch in the face of a pay decrease. SD at 28-29. Zuffa misunderstands Dr. Singer’s analysis: his input markets include

only promoters, SR1 ¶¶109, 111, 114; SR2 ¶16, but he distinguishes between promoters *by focusing on the Fighters* they have under contract. He does so for a good reason: a promoter is only as attractive as its roster of Fighters. A Fighter will switch to a promoter only if the promoter has available other Fighters such that it can arrange competitive matches and advance the Fighter's career.⁷² Dr. Singer identifies that as *the* critical factor in determining, from a Fighter's perspective, whether to switch promoters. *See, e.g.*, SR1 ¶¶104, 112, 156-58, 164.⁷³ Zuffa's own economist agreed. *See* TR1 ¶96; CD2, Ex. 57 (Topel Dep. 2) at 432:25-434:3.

Dr. Singer's analysis is legally and economically appropriate. The parties agree that, under the Merger Guidelines, a firm has monopsony power if it is capable of "profitably decreas[ing] compensation to athletes." SD at 28. The parties also agree that, under the Merger Guidelines, an input market includes only those promoters to which Fighters could turn to prevent a promoter from imposing a "Small but Significant Non-transitory Decrease in Price [or compensation]" or "SSNDP." *Id.*; Merger Guidelines, § 12; SR1 ¶98.⁷⁴ In other words, to be in the same input market, a promoter needs to be a sufficiently good substitute that a Fighter would switch if Zuffa imposed a SSNDP. *See Paladin*, 328 F.3d at 1163; SR1 ¶¶98-99. If a promoter does not have a sufficiently good pool of Fighters, then it will not be an appropriate substitute.⁷⁵

Accordingly, Dr. Singer's Ranked definition includes every promoter that could possibly have a pool of suitable opponents—including those ranked as low as 650th in a particular weight class. *See*

⁷² To be clear, that was true because of Zuffa's Scheme. Without its Scheme, promoters allow their Fighters to compete against one another, promoters could compete against each other for Fighters' services, Fighters would have greater bargaining power, and Zuffa would have less market power, causing Zuffa's Wage Share to increase.

⁷³ "In economic terms, Fighters are perfect complements in the MMA bout production function." SR1 ¶156. That means that an individual Fighter requires other Fighters to compete against in multiple bouts per year. A promoter that lacks a roster of Fighters of sufficient quality to match up against is not a reasonable substitute.

⁷⁴ *See also United States v. Aetna, Inc.*, 1999 WL 1419046, at *15 (N.D. Tex. Dec. 7, 1999); *United States v. Sony Corp. of Am.*, 1998 WL 1542829, *11 (S.D.N.Y. May 6, 1998).

⁷⁵ *See* Naidu, Posner & Weyl, *Antitrust Remedies for Labor Market Power*, HARV. L. REV. at 28 (forthcoming) (Feb. 23, 2018), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3129221 ("[for] labor markets. . . not only the needs of firms, but also the preferences of workers, help determine the bounds of the market").

1 *Geneva*, 386 F.3d at 496 (“The goal in defining the relevant market is to identify the market
 2 participants and competitive pressures that restrain an individual firm’s ability to raise prices or restrict
 3 output.”).⁷⁶ Notably, Zuffa’s own economists used the same rubric to evaluate the interchangeability of
 4 promoters: the quality of a promoter’s Fighters. TR1 ¶209 ([REDACTED]
 5 [REDACTED]); BR1 ¶23 (considering input market comprising promoters
 6 affiliated with former Zuffa Fighters). Dr. Topel even complained that promoters with “ [REDACTED]
 7 [REDACTED] ” were excluded from the Tracked definition. TR1 ¶212. Dr.
 8 Topel, however, does not identify *any* such excluded promoters. Dr. Singer’s Ranked definition satisfies
 9 Dr. Topel’s Fighter-focused test, including *all* promoters with *any* ranked Fighters. SR1 ¶¶99, 110-11;
 10 SR2 ¶24.

11 Zuffa also argues that Dr. Singer’s input market definitions are flawed because he relies on
 12 “record evidence” and “the results of his impact regression” instead of market data about features of
 13 competing products. SD at 29-30.⁷⁷ But, while a regression is not necessary in defining a market,⁷⁸ Dr.
 14 Singer’s impact regressions *showing* Zuffa suppressed compensation while controlling only its own
 15
 16

17 ⁷⁶ Zuffa’s reliance on *Little Rock Cardiology Clinic PA v. Baptist Health*, 591 F.3d 591, 597 (8th Cir.
 18 2009), SD at 29, is misguided. There, the plaintiff cardiologists defined a relevant market in their
 19 monopolization suit against a health system and insurer based on the type of insurance patients used.
 20 *Id.* The court criticized the market definition because, from the perspective of the cardiologists,
 21 different types of insurance are “reasonably interchangeable” because money is fungible. *Id.* Here, by
 22 contrast, Dr. Singer distinguishes promoters on what the economists on both sides agree is a critical
 23 differentiating factor: the quality of their pools of Fighters. Fighters, unlike dollars, are not fungible.

24 ⁷⁷ Zuffa cites two cases for the proposition that an economist must rely on “market data” in defining a
 25 relevant market, SD at 5 & 29, but neither so holds. *Grason Elec. Co. v. Sacramento Mun. Utility Dist.*,
 26 571 F. Supp. 1504 (E.D. Cal. 1983), SD at 29, upholds a relevant market based on judicially noticed
 27 record facts even though Plaintiffs’ expert *had failed to offer any analysis based on* “market data,
 28 figures or other relevant material[.]” *Id.* at 1521. And, the court in *AFMS LLC v. United Parcel Serv.*
Co., 2014 WL 12515335 (C.D. Cal. Feb. 5, 2014), SD at 5, excluded a non-economist’s relevant market
 opinion where the proffered expert (a) conceded that his opinions were “not based on economic
 theories or principles,” and (b) offered “no explanation for how he arrived at his conclusions.” *Id.* at *7.

⁷⁸ See, *supra*, n.65 (citing cases). Zuffa’s repeated assertion that *Zenith Elecs. Cor. v. WH-TV Broad.*
Corp., 395 F.3d 416 (7th Cir. 2005), requires an expert to use regression analysis in market definition,
 SD at 35-38, is wrong. *Zenith* stands only for the unremarkable proposition that an expert may not
 “rely[] on intuition” alone in defining markets. 395 F.3d at 418.

Fighters are sufficient.⁷⁹ Zuffa misses the point by claiming that “regression results are meaningful only if the market is properly defined.” SD at 32. “A relevant market” is “any grouping of sales whose sellers, if unified by a hypothetical cartel or merger, could profitably raise [or lower] prices significantly above [or below] the competitive level.”⁸⁰ Thus, the regression results *showing* that Zuffa was able to suppress compensation to Fighters profitably by controlling only its own Fighters *mean* that the market should be limited to Zuffa’s Fighters, and certainly should be no broader than Dr. Singer’s Tracked, Ranked, or Headliner alternatives.⁸¹ Zuffa is also wrong that a plaintiff must show output suppression *and* pay suppression to demonstrate market power directly. SD at 32. Either suffices. *Rebel Oil Co.*, 51 F.3d at 1438 n.10 (proof of price *or* output effect necessary). In any case, Dr. Singer shows both. SR1 ¶¶145-46, 148, 193-94, 197-207; SR2 ¶¶42-49, 202-207.⁸²

Moreover, the other evidence on which Dr. Singer relies *includes* market data and other relevant material that distinguish promoters—including principally the quality and caliber of their Fighter pools.⁸³ Dr. Singer also relies on two industry-accepted databases—FightMetric and FightMatrix—

⁷⁹ Zuffa’s claim that “Dr. Singer admitted that he never assessed whether Zuffa suppressed actual athlete compensation,” SD at 32, is wrong and misleading. He was asked whether his regressions use wage levels or Wage Share, and he testified that he uses only the latter because “it’s the right thing to look at from an economic perspective[.]” CD2, Ex. 52 (Singer Dep. 1) at 295:6-296:8. As discussed in detail above, the regressions demonstrate that Zuffa suppressed Fighter pay. *Supra* at 36-38.

⁸⁰ *AD/SAT, Div. of Skylight, Inc. v. Associated Press*, 181 F.3d 216, 228-29 (2d Cir. 1999). The market is the “smallest possible group of products” that satisfies this test. *AREEDA & HOVENKAMP, supra* n.14, ¶536; Merger Guidelines § 1.11 (2010).

⁸¹ Dr. Singer testified his impact regressions show the market likely included “just the fighters under Zuffa’s control,” because Zuffa needed to control no other Fighters to lower pay by a small but significant degree without defections. CD2, Ex. 52 (Singer Dep. 1) at 292:7-294:3. To be conservative, he nevertheless relies on broader definitions of the market. *Id.*

⁸² Dr. Singer’s analysis is consistent with analysis in *United States v. Oracle Corp.*, 331 F. Supp. 2d 1098, 1118 (N.D. Cal. 2004), SD at 28 & 32, which assesses anticompetitive effects of a merger. *Oracle* observed that the proper focus is on the degree to which price increases by the merged entity could be countered either by buyers (the merged entity’s customers) moving to competitive products or sellers (competitors) ramping up production. 331 F. Supp. 2d at 1118. In a monopsony case, the analog would be to evaluate the degree to which a pay decrease by a buyer (Zuffa) could be countered by sellers (Fighters) moving to other promotions or buyers (other promotions) ramping up hiring. That is precisely Dr. Singer’s analysis here.

⁸³ *See, e.g.*, SR1 ¶¶105-14, 134-40 (discussing (1) Zuffa’s own documents, public statements, and its employees’ testimony describing [REDACTED]; (2) Deutsche Bank’s internal report ([REDACTED])

used by MMA promotions including Zuffa. *See id.* ¶¶108-11. The UFC’s longtime matchmaker, Joe Silva, testified that the FightMetric data (used for the *narrower* Tracked definition) was “very credible.” CD2, Ex. 50 (J. Silva Dep.) at 162:19-164:18; *see Daiichi Pharmaceutical Co., Ltd v. Apotex, Inc.*, 2005 WL 7979497, at *3-4 (D.N.J. Nov. 1, 2005) (accepting expert testimony based on data accepted in the relevant industry).⁸⁴ Zuffa’s criticism of Dr. Singer’s reliance on FightMatrix data makes little sense given that Dr. Singer uses this database solely to *broaden* the market for his Ranked definition. Zuffa does not challenge Dr. Singer’s use of FightMetric for the *narrower* Tracked definition. Further, many of the promoters Dr. Singer includes in the input market [REDACTED]. SR1 [REDACTED]. ¶¶105-09, 111.

Finally, Zuffa’s reliance on *In re Live Concert Antitrust Litig.*, 863 F. Supp. 2d 966 (C.D. Cal. 2012), SD at 30-31, is misplaced. *Live Concert* excluded a market definition because it was based solely on an expert’s supposed “qualitative assessment” of whether musicians played “rock.” *Live Concert*, 863 F. Supp. 2d at 985-86, 988-90 & 994-95.⁸⁵ Dr. Singer, by contrast, follows the Merger

[REDACTED]; (3) other promoters’ public statements and conduct; and (4) [REDACTED]. Dr. Singer further reviewed [REDACTED] *lator. See, e.g., id.* at Table 3.

⁸⁴ Zuffa nitpicks about Dr. Singer’s supposed lack of “industry expertise,” SD at 30-31, but identifies no material error flowing from that purported failing. Zuffa notes that Dr. Singer includes over 200 promoters in his Ranked definition, but “only provides qualitative descriptions of a handful of promoters.” *Id.* And it complains about Dr. Singer’s observation of the *admitted fact* that non-Zuffa promoters “do not have access to a sufficiently deep pool of talented Fighters to provide competitive matchups to advance a Zuffa Fighter’s career.” SD at 31. *See* CD2, Ex. 57 (Topel Dep. 2) at 437:11-441:10; SR2 ¶29. Zuffa does not explain why this is problematic, or how additional “qualitative descriptions” would have altered the results. Indeed, that most of the promoters Dr. Singer conservatively includes are relatively insignificant outfits demonstrates just how careful and conservative Dr. Singer’s work is.

⁸⁵ Zuffa also cites *Mazda* for the proposition that Dr. Singer’s “market definitions have been excluded in the past for failing to properly define the scope of the market.” SD at 32. Incorrect. First, *Mazda* did not “exclude” Dr. Singer’s testimony, but rather considered the weight and not the admissibility of Dr. Singer’s opinion. *Mazda*, 2016 WL 7231941, at *12. Second, the scope of the relevant market was not at issue on the motion because the parties had stipulated to it. *Id.* at *11.

Guidelines, using industry-accepted databases and rankings, not his own subjective view of Fighter quality. *See, e.g.*, SR1 ¶¶99-114; SR2 ¶¶16-26.⁸⁶ Dr. Topel could not name a single MMA promoter with a “material share of the MMA promotion business” that was not in one of those databases. *See* CD2, Ex. 57 (Topel Dep. 2) at 478:8-16. Zuffa cites evidence purporting to demonstrate that it competes with some MMA promoters for Fighters, SD at 31, but neglects to mention that *all* of those entities are *in* Dr. Singer’s defined markets. *See* SR1 ¶¶109-10.⁸⁷

b. Dr. Singer’s Relevant Output Market Is Reliable.

Zuffa asserts that Dr. Singer’s output market—“Live MMA Events in which the participating Fighters are . . . in the Relevant Input Market” SR1 ¶115—is unreliable because he considers only viewers and not “cable distributors, sponsors, or cable networks.” SD at 33 (relying on *Kentucky Speedway v. Nat’l Ass’n of Stock Car Auto Racing, Inc.*, 588 F.3d 908 (6th Cir. 2009)). Dr. Singer’s analysis appropriately focused on viewers, first, because, as he notes without contradiction from Zuffa’s economists, “the demand for Live MMA Events is ultimately driven by audience preferences.” SR1 ¶115. Second, the Output Market is relevant here only to the extent that it can help determine whether Zuffa had the market power to harm consumer welfare by raising prices and reducing MMA output.⁸⁸ Dr. Singer shows that [REDACTED]. SR1 ¶¶147-48; SR2 ¶¶47-49; *supra* at 37-39. Showing that Zuffa *also* had the power to raise prices to sponsors, cable

⁸⁶ Industry-accepted databases are appropriate for analyzing relevant markets. *See, e.g., United States v. Bazaarvoice, Inc.*, 2014 WL 203966 at *32-33 (N.D. Cal. Jan. 8, 2014) (approving of expert’s use of a public list of retailers and data concerning same over the defendant’s reliability objections because the list and data “are well-recognized by companies” involved in the market).

⁸⁷ Zuffa’s reliance on *Golden Boy Promotions LLC v. Haymon*, 2017 WL 460736 (C.D. Cal. Jan. 26, 2017), SD at 32, is likewise misplaced. Unlike here where Zuffa has not identified any firms with material market share that were excluded, the expert in *Golden Boy* sought to exclude all managers of “non-Championship caliber” boxers but failed to address undisputed facts showing that non-Championship boxers could develop into champions. 2017 WL 460736, at *11-12. Here, conversely, Dr. Singer conservatively includes promoters of non-Championship caliber Fighters.

⁸⁸ *See, e.g., U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589, 598 (1st Cir. 1993) (one must ask “why we are [asking the question in the first place]: that is, what is the antitrust question in this case that market definition aims to answer?”).

1 networks, or cable distributors is not necessary for any claim or defense in this case. Zuffa does not
2 argue otherwise.

3 **5. Dr. Singer Uses Reliable Methods to Measure Zuffa's Market Share.**

4 Dr. Singer reliably shows that Zuffa had a dominant share of the relevant input market. To
5 determine market share, Dr. Singer weights each promoter by the amount of Event Revenues its pool of
6 Fighters generated. SR1 ¶128; SR2 ¶128.⁸⁹ Dr. Singer determines that "[REDACTED]
7 [REDACTED]
8 [REDACTED]." SR1 ¶129. Zuffa says that Dr. Singer's use of "downstream [event]
9 revenue" to weight promoters, SD at 33-34, unfairly inflates Zuffa's share of the input market by
10 supposedly reflecting Zuffa's success in generating revenues. *Id.* Zuffa contends that Dr. Singer should
11 have instead followed Dr. Zimbalist and measured the respective "importance" of Fighters primarily by
12 "weighting . . . according to their compensation." SD at 34. *But that is essentially what Dr. Singer does.*
13 He could not use Fighter compensation here, however, because Zuffa pay was artificially low due to the
14 Scheme and, in any event, he did not have sufficient data to measure Fighter pay directly for non-Zuffa
15 promoters. But he did have Event Revenue data.⁹⁰ Given that Fighter pay would be roughly
16 proportional to Event Revenues across different promotions in a competitive market, weighting
17 promotions by Event Revenues would have a similar effect to weighting them by Fighter pay (as Zuffa
18 suggests). SR1 ¶¶128-29; SR2 ¶¶5, 8, 133-36.⁹¹ None of Zuffa's economists explains how weighting by
19

20
21 ⁸⁹ Zuffa notes that Dr. Singer uses revenue weights to calculate "Foreclosure Share" as well as market
22 share, *but Zuffa only challenges Dr. Singer's use of revenue weights to calculate market share.* See SD
23 at 33-35. Similarly, while Zuffa says that Dr. Singer uses "a variety of weighting methods," Zuffa
24 describes and challenges only one: revenue weights. See SD at 33-35. Thus, Zuffa has waived any
25 challenge to Dr. Singer's use of rank-weighting in his Submarket market share analyses, or any of his
26 rank or revenue weighting methods as part of his Foreclosure Share analyses. SR1 ¶182 (describing
27 weighting methods for Foreclosure analysis); SR2 ¶¶128-148 (same).

28 ⁹⁰ To be conservative, Dr. Singer assumes that small promoters (for whom no revenue data were
available) had the same revenue per Fighter as (relatively) large non-Zuffa promoters such as
Strikeforce and Bellator. SR1 ¶128, n.350. Most likely, their revenue per Fighter was smaller.

⁹¹ As Dr. Singer explains, Zuffa's argument that it is "more successful at generating event revenues,"
SD at 33-34, "fails to explain how differences in event revenue across different MMA promoters could
be the result of factors completely unrelated to Fighters." SR2 ¶136.

1 Event Revenues—instead of Fighter compensation—could bias the results.⁹²

2 In attempting to criticize Dr. Singer’s weighting method, Zuffa misapplies it. For instance, Zuffa
3 claims Dr. Singer gives less weight to top-ranked Bellator Fighters than to low-ranked Zuffa Fighters.
4 See SD at 34. But Dr. Singer does not “weight” *individual* Fighters; he weights each promotion’s pool
5 of Fighters *collectively*. SR2 ¶¶134-35. He thus weights the *average* Zuffa Fighter substantially more
6 than the *average* Bellator Fighter—an outcome neither Zuffa nor any of its economists contests.
7 Weighting a promotion by the average *pay* of its Fighters—the method Zuffa *favors*, SD at 34—would
8 produce the same result. In short, the appropriate undertaking is to weight *a roster of Fighters* by its
9 collective importance to detect, as Zuffa puts it, “the concentration of the purchase of the input.” SD at
10 34.⁹³ That is what Dr. Singer does.⁹⁴ Zuffa’s criticism of Dr. Singer’s methodology thus depends on a
11 mischaracterization of it.

12
13 ⁹² Zuffa erroneously argues that Dr. Singer’s revenue weights do not answer the pertinent question:
14 “what is Zuffa’s share of MMA athletes?” SD at 34-35. That is false. Zuffa mischaracterizes Dr.
15 Singer’s method. He appropriately weights promoters by evaluating the revenue-generating power of
16 their respective pools of Fighters. That is the most appropriate way of determining Zuffa’s share of the
17 input market.

18 ⁹³ Zuffa makes a similar error in arguing Dr. Singer’s revenue weighting is inappropriate because his
19 impact regressions would, theoretically, weight the same athlete differently based on the promoter with
20 which the Fighter was affiliated. SD at 35. Zuffa again mischaracterizes Dr. Singer’s method as
21 applying to *individual* Fighters; it *collectively* weights a promotion’s Fighter pool. SR2 ¶134. Zuffa also
22 incorrectly assumes that revenues stay static when Fighters switch promoters. Zuffa misses that a
23 Fighter (or group of Fighters) moving to a new promoter could change its revenue-generating power.
24 CD2, Ex. 60 (Singer Dep. 2) at 440:24-441:24 (explaining this point).

25 ⁹⁴ Zuffa cites the Ninth Circuit’s decision in *United States v. Syufy Enterprises*, 903 F.2d 659 (9th Cir.
26 1990), asserting, “There is no economically sound basis to use downstream revenue from viewers,
27 networks and sponsors to weight the shares of the input market.” SD at 34 (citing *Syufy*, 903 F.2d at
28 666 n.10). But *Syufy* did not reject using downstream revenues, holding instead, “The district court was
entitled to rely on any of several indicia of Syufy’s market share, including . . . its percentage of gross
box office receipts.” 903 F.2d at 666 n.10. The Ninth Circuit did conclude using only downstream
revenues to evaluate market power was not appropriate *in that case* because the connection between
downstream revenues and upstream market power was unclear. *Id.* Zuffa implies that MMA promotions
are like the cinemas in *Syufy* who buy “first-run movies with no certainty regarding the movie’s likely
success.” SD at 34. But, here, there is no dispute that Fighter pay is *proportional* to Event Revenues,
supra at 20-21 & n.42, and thus the latter can serve as a proxy for the former. Further, Dr. Singer’s
method is consistent with that endorsed in *United States v. Rice Growers Association of California*,
1986 WL 12562, at *10-11 (E.D. Cal. Jan. 31, 1986). SD at 34. There, the expert assessed share of an
input market using a revenue-weighting scheme based on the total dollar purchases of each rice buyer.

Finally, Zuffa’s lawyers—again without citing its economists—accuse Dr. Singer of “cherry-pick[ing] data” by using “PPV revenue and gate revenues, and not broadcast TV revenue” for promoters other than the UFC. SD at 35.⁹⁵ But Dr. Singer applies the same standard to all promoters, excluding the millions of dollars of *UFC* broadcast revenues and using revenue streams that are reported consistently over time for a range of promoters. SR1 ¶128, n.350; SR2 at II.F. Zuffa provides no reason to believe that this data choice biased the analysis. Moreover, Dr. Singer’s estimates are conservative because he assumes that small promoters have the same revenue per Fighter as (relatively) large non-Zuffa promoters. SR1 ¶128, n.350.

VI. ZUFFA’S *DAUBERT* ATTACKS ON DR. ZIMBALIST LACK MERIT

Dr. Zimbalist: (1) opines that Zuffa’s Scheme is anticompetitive; (2) contests any procompetitive justifications for it; and (3) confirms the reasonableness of Dr. Singer’s analysis of Bout Class damages. ZR1 at III, IV, V, VI; ZR2 at III, V, VI, VII, VIII. Zuffa challenges only his opinion on damages. ZD at 1. First, it claims Dr. Zimbalist “invented a metric called ‘labor share’ (referred to herein as the pay-to-revenue ratio, or ‘PTRR’).” ZD at 2, 18-19. But, as explained above, Zuffa’s criticism of labor share—or Wage Share⁹⁶—is untenable and, indeed, Zuffa has in effect abandoned it. *Supra* at V.A. So Dr. Zimbalist—like Dr. Singer—is right to use Wage Share.

Second, Zuffa’s *lawyers* repeat the sophistic argument they make against Dr. Singer: that in a competitive market Zuffa would pay its Fighters up to their marginal revenue product (MRP), and MRP cannot be measured, so Dr. Zimbalist’s yardsticks do not measure damages properly. ZD at 19-20. If that position were right, there would be no way to calculate damages *ever* in a monopsony case. But it isn’t. As already noted, economists and businesspeople routinely use Wage Share to assess the difference between actual pay and MRP. *Supra* at V.A.1-2. Further, Dr. Zimbalist explains why his use of Wage Share is appropriate here. ZR2 ¶¶35-37. Dr. Manning—whom both parties agree is

⁹⁵ Dr. Singer’s data analysis is nothing like the expert’s in *SMS Systems Maintenance Services Inc. v. Digital Equipment Corp.*, 188 F.3d 11, 25 (1st Cir. 1999). SD at 35. In *SMS*, the expert found monopoly power based in part on his opinion of customer satisfaction without conducting a survey, citing sources or data, or explaining why it was valid or representative. 188 F.3d at 25.

⁹⁶ It is the ungainly term “PTRR” that Zuffa has invented. Plaintiffs use Wage Share instead.

“particularly authoritative”—also explains why use of Wage Share to estimate MRP is proper in this case. MR1 ¶¶5-6, 24-31. And Zuffa does not cite any of its economists in arguing about MRP and so provides no evidentiary support for its position.⁹⁷

Zuffa also argues in various ways that Dr. Zimbalist selects yardsticks that are not sufficiently comparable to the UFC. Zuffa is wrong. His yardsticks have “as much in common as possible” with the UFC, and he controls for the remaining differences. CD2, Ex. 51 (Zimbalist Dep. 1) at 150:3-151:18; *see* ZR2 at VI. Further, Dr. Zimbalist offers five different sports as yardsticks. The similarity in the Wage Share they pay athletes—and the contrast with the UFC’s Wage Share—confirm the merits of the professional sports he uses as yardsticks: [REDACTED]

[REDACTED]. CD, Ex. 10 (Zimbalist Errata) Table 4-E.

A. Dr. Zimbalist’s Yardstick Method for Calculating Damages Is Reliable

The yardstick approach is “a reasonable and commonly-used formulaic approach to calculating damages” that is “widely upheld by courts.” *In re Live Concert Antitrust Litig.*, 247 F.R.D. 98, 145 (C.D. Cal. 2007) (citing cases, quotation and citations omitted).⁹⁸ Under a yardstick approach, the amount of damages is “the difference between what the plaintiff could have made in a hypothetical free

⁹⁷ Dr. Zimbalist’s rebuttal explains why Wage Share provides a reliable method for evaluating Zuffa’s monopsony power over Fighters. ZR2 ¶¶28-51. Zuffa quotes selectively from Dr. Zimbalist’s deposition to claim he performed no “empirical” analysis to compare the ratio of MRP to revenue in MMA and his yardsticks. In fact, the record reflects that [REDACTED]

[REDACTED]. ZR1 ¶¶127-138; ZR2 ¶37 (citing CD2, Ex. 59 (Blair Dep. 2) at 307:1-309:2, 309:6-311:22, 312:11-13, 313:4-24). In contrast, Zuffa points to *no* evidence that Dr. Zimbalist’s conclusion is unreliable. Indeed, Dr. Blair *admitted* that he has no reason to believe that athletes in Dr. Zimbalist’s yardstick sports generate a higher percentage of revenue than athletes in MMA. *Id.* at 315:1-8.

⁹⁸ As Zuffa admits, use of a “yardstick” is an “accepted method to measure damages in an antitrust case.” ZD at 4 (citing *Muffett v. City of Yakima*, 2012 WL 12827492, at *2 (E.D. Wash. July 20, 2012)); ZR2 ¶53, n. 98 (Zuffa’s own economist, Dr. Blair, admitting yardstick is “recognized” approach for calculating damages) (citing Blair Dep. 333:24-334:1). *See also* IIA Areeda, Hovenkamp, Blair, Durance, *Antitrust Law*, ¶399b, p. 445 (3d ed. 2007) (the yardstick approach is “considered. . . well-established and reliable”); *In re Rubber Chems. Antitrust Litig.*, 232 F.R.D. 346, 354 (N.D. Cal. 2005) (approving class certification where expert had shown classwide common proof of damages using yardstick approach).

1 economic market and what the plaintiff actually made in spite of the anticompetitive activities.” *Image*
 2 *Tech.*, 125 F.3d at 1221 (quotation and citation omitted). All that is required is that the two have some
 3 “meaningful economic similarity.” *Id.* at 1222.

4 Putting aside Wage Share, the main disagreement between Dr. Zimbalist and Zuffa is about how
 5 similar a yardstick—or comparator—needs to be. As Zuffa admits, Dr. Zimbalist’s approach is to
 6 identify other sports leagues that have *as much as possible* in common with the UFC. ZD at 4
 7 (“comparators that have as much in common with the base enterprise or industry as possible but vary in
 8 the important respect that you’re trying to identify”) (quoting CD2, Ex. 51 (Zimbalist Dep. 1) at 150:3-
 9 13, 151:13-18). That methodology satisfies *Daubert*. See *Tawfilis v. Allergan, Inc.*, 2017 WL 3084275
 10 at *6 (C.D. Cal. June 26, 2017) (“the yardstick market [should] be *as comparable as possible*”).⁹⁹
 11 Zuffa, in contrast, asserts that a yardstick must be “similar in *all* respects other than the alleged antitrust
 12 violation.” ZD at 6 (emphasis added). It quotes Prof. Hovenkamp’s Federal Antitrust Policy from a
 13 passage that itself cites *Bigelow*. *Id.* (quoting *Federal Antitrust Policy*, ZD, Ex. 3 at 670). As noted
 14 above, that Supreme Court case holds that a defendant *cannot* rely on the uncertainty it created in
 15 violating the antitrust laws to avoid liability, so plaintiffs are permitted to do what is practicable in
 16 proving damages, *Bigelow*, 327 U.S. at 265, a principle courts have reaffirmed time and again. See
 17 *supra* V.D.1. Zuffa’s proposed approach—requiring a yardstick similar *in every respect*, other than the
 18 antitrust violation, even if none exists, ZD at 8—is an impracticable one the Supreme Court and the
 19 Ninth Circuit have rejected. See *supra* V.D.1.

20 **B. Dr. Zimbalist Selects Proper Yardsticks that Are Comparable to MMA**

21 As far as Dr. Zimbalist’s implementation of his methodology, Zuffa paints a caricature and then
 22

23
 24 ⁹⁹ The other cases Zuffa cites are inapposite. Neither *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 145-46
 25 (1997), ZD at 15, 20, nor *In re Silicone Gel Breast Implants Prod. Liab. Litig.*, 318 F. Supp. 2d 879,
 26 898 (C.D. Cal. 2004), ZD at 8, even involve the yardstick method, but rather address the extrapolation
 27 of animal studies to human beings. In *Joiner*, the testimony was excluded because the expert relied on
 28 studies of mice exposed to massive concentrations of PCBs that were “so dissimilar to the facts
 presented” that they could not lead to the conclusion that minor PCB exposure caused plaintiffs’ cancer.
 522 U.S. at 144-145. In *Silicone Gel*, an expert’s description of a study as containing “suggestive”
 evidence of an association between PUF-coated breast implants and cancer was not reliable where only
 1.3% of the implants in the study were PUF-coated. 318 F. Supp. 2d at 898.

attacks it. Zuffa argues Dr. Zimbalist (a) uses a damages method with no standards, ZD at 5-8, (b) that the standard he purportedly uses (note Zuffa’s internal inconsistency), *i.e.*, “as much in common as possible,” does not require anything in common, *id.* at 8-9, (c) that the yardsticks he chooses suffer from selection bias, *id.* at 9-10, and (d) that he chooses comparisons arbitrarily. *Id.* at 10-15. Unsurprisingly, none of that accurately describes what Dr. Zimbalist does. In reality, Dr. Zimbalist identifies the sports markets that are most similar to the UFC—*ones Zuffa’s own consultants have used as comparators*—and that do not suffer from as great a lack of competition as the UFC. As Dr. Zimbalist explains, with respect to the major league sports and boxing, each produces a similar product (live sporting events), with similar business models (maximize attendance and fan engagement), and similar revenue sources (gate receipts, premium charges, media revenue, *etc.*). ZR2 ¶¶56. They all use athletes as their primary input, and the popularity of the athletes drives demand for the sport and thus revenues. *Id.* In addition, the yardsticks share other inputs, such as venues, officials, production, and marketing. ZR1 ¶¶132-134.

[REDACTED]. See ZR1 ¶107 (citing CD2, Ex. 66 (ZFL-1425511) at 11-12, 16-17; CD2, Ex. 64 (ZFL-1070290) at 327; CD2, Ex. 84 (ZUF-00113209) at 11).

[REDACTED] ZR1 ¶108 (citing CD2, Ex. 62 (ZFL-0557588) at 91) (emphasis added). [REDACTED]

[REDACTED] ZR1 ¶108 (citing CD2, Ex. 62 (ZFL-0557588) at 95). [REDACTED]

ZR1 at n. 225 (citing CD2, Ex. 62 (ZFL-0557588) at 92-93). [REDACTED]

[REDACTED] ZR1 ¶108 (citing CD2, Ex. 71 (WME_ZUFFA_00005368)). Dr. Zimbalist’s approach is thus grounded in the “market

facts” of this case. *In re Online DVD Rental Antitrust Litig.*, 2011 WL 5883772, at *15.

Dr. Zimbalist also explains why boxing is “structurally similar” to MMA, including the nature of the sport and the role and business model of promoters. ZR1 ¶¶89-90, 110. In contrast, Zuffa’s lawyers speculate about differences between boxing and MMA in a footnote, without citation or explanation of why those differences would matter. ZD at 11 n.6. In fact, the differences between MMA and boxing support boxing as a yardstick. For example, as Dr. Zimbalist explains, legislation limiting the enforceability of exclusive contracts in boxing makes it a good yardstick for gauging what the UFC’s Wage Share would be if not for Zuffa’s Scheme. ZR1 ¶¶101-103, 110; ZR2 ¶¶72, 110.

For the above reasons, Dr. Zimbalist’s yardsticks do not suffer from “selection bias.” ZD at 9-10. Zuffa suggests that Dr. Zimbalist did not do “a broad review of potentially comparable firms.” *Id.* at 4. That ignores that Dr. Zimbalist’s extensive experience in sports economics allows him to choose yardsticks that are “as comparable as possible in all respects” to the MMA market except that they had greater competition. *Tawfilis*, 2017 WL 3084275, at *6. Dr. Zimbalist does not pick his yardsticks arbitrarily, but rather for good reason and rejects the other sports and industries Zuffa identifies, such as Major League Soccer, ZR2 ¶78, the Association of Tennis Professionals, ZR2 ¶¶79-80, NASCAR, CD2, Ex. 51 (Zimbalist Dep. 1) at 236:10-19, and the movies. ZR2 ¶¶81-82. [REDACTED]

[REDACTED] ZR2 ¶82.¹⁰⁰

Zuffa also implies erroneously that Dr. Zimbalist’s *only* reason for choosing his yardsticks was that he was “familiar with them from his previous work,” suggesting, oddly, that Dr. Zimbalist should

¹⁰⁰ This case is thus distinguishable from (1) *Manzen* (ZD at 8, 10, 22), where the challenged expert based his analysis of plaintiff non-alcoholic beverage distributor’s lost sales due to contract breach on informal interviews of a sample that contained almost exclusively distributors of only alcoholic beverages, and the expert was “unable to attest to the reliability of his own lost profit analysis,” *R&R Int’l, Inc. v. Manzen, LLC*, 2010 U.S. Dist. LEXIS 94550 (S.D. Fla. Sep. 12, 2010) at *15, 32-33, 35; and (2) *Allgood* (ZD at 10), where the challenged expert cherry-picked only the most incriminating samples of contaminated soil and “failed to offer to offer any scientific justification for his sample selection choices.” *Allgood v. Gen. Motors Corp.*, 2006 WL 2669337, at *35 (S.D. Ind. Sept. 18, 2006).

1 have used *less similar* yardsticks from *outside* of sports. ZD at 4-5 (“So why didn’t you include any
 2 firms *outside of sports* that sell tickets and media rights?”) (quoting CD2, Ex. 51 (Zimbalist Dep. 1) at
 3 237:20-238:21) (emphasis added). As Dr. Zimbalist’s deposition testimony makes clear, that was only
 4 “one of the reasons” he chose his yardsticks. CD2, Ex. 51 (Zimbalist Dep. 1) at 237:20-238:16. The
 5 other reasons include that his yardsticks are in the sports industry and thus “ha[ve] the same basic
 6 revenue sources and the same nature of costs” as well as provide him “better access to the data [he]
 7 would need.” CD2, Ex. 51 (Zimbalist Dep. 1) at 238:17-240:3.

8 Zuffa also identifies a few restrictive contractual provisions in Dr. Zimbalist’s yardsticks and
 9 claims he thus cannot use them to establish Zuffa’s Scheme caused the alleged damages. ZD at 11, 13.
 10 Zuffa is wrong, first, because a few restrictive clauses in athlete contracts in Dr. Zimbalist’s yardstick
 11 sports would make them *understate* damages. ZR2 ¶¶67-69. To the extent the restrictive clauses
 12 hampered competition for athletes’ services, the yardsticks too reflect some degree of
 13 undercompensation. *Id.* Second, the restraints in his yardstick sports are much *less* restrictive than
 14 Zuffa’s Exclusive Contracts. In the team sports, for example, among other differences,¹⁰¹ [REDACTED]
 15 [REDACTED]
 16 [REDACTED]. ZR1 ¶77. Similarly, with respect to boxing, Zuffa cites [REDACTED]
 17 [REDACTED] to argue that boxing promoters use *all* of the same contractual
 18 provisions as Zuffa. ZD at 13. [REDACTED]
 19 [REDACTED],¹⁰² [REDACTED]. Dr. Zimbalist’s boxing
 20 yardstick reliably measures the harm from Zuffa’s Scheme because—as with team sports—there are
 21 enough relatively unrestricted athletes for meaningful competition, as indicated by the at least [REDACTED]
 22 [REDACTED]

23 ¹⁰¹ For example, [REDACTED]
 24 [REDACTED]. ZR1 ¶77.

25 ¹⁰² [REDACTED]
 26 [REDACTED]
 27 [REDACTED]
 28 [REDACTED]

1 boxing promoters capable of holding major championship fights each year, [REDACTED]
 2 [REDACTED]. ZR1 ¶91. As one court
 3 observed, “Unlike other sports, such as football, baseball, and golf, boxing has not naturally evolved
 4 towards having a single entity controlling most or all of the professionally televised events in the
 5 sport.” *Golden Boy*, 2017 WL 460736, at *13.¹⁰³ And, as with the other yardsticks, restrictions on
 6 competition in boxing simply make it a conservative yardstick—understating damages.

7 Finally, Zuffa’s questioning of the similarity between Dr. Zimbalist’s yardsticks and the UFC go
 8 to the weight of his testimony, not its admissibility. “Whether that ‘unaffected’ business properly
 9 compares to the relevant market presents a question of fact for the jury.” *Image Tech.*, 125 F.3d at 1222;
 10 *see also In re Dynamic Random Access Memory Antitrust Litig.*, 2006 WL 1530166, at *9 (N.D. Cal.
 11 June 5, 2006) (“Defendants’ challenge to plaintiffs’ evidence . . . goes to the merits of plaintiffs’ case,
 12 and must therefore be left to the trier of fact.”); *see also supra* at 35 (citing cases denying *Daubert*
 13 challenges to yardstick testimony).

14 C. Dr. Zimbalist Controls for Differences between his Yardsticks and the UFC

15 As Zuffa concedes, a yardstick can have relevant differences, even if “it is important to take into
 16 account any differences” between “the yardstick market and the market at issue in the but-for-world.”
 17 ZD at 7 (citation omitted). Zuffa claims Dr. Zimbalist has “failed to control” for any differences
 18 between his yardsticks and the UFC and that his methodology is “similar” to the one excluded in *Live*
 19 *Concert*. ZD at 9. Untrue. In *Live Concert*, the expert failed “to account for differences in artist
 20 quality/popularity” and instead simply compared absolute ticket prices between the defendants and
 21

22 ¹⁰³ In addition, the structure of boxing allows competition, unlike in MMA. The Muhammad Ali
 23 Boxing Reform Act (“Ali Act”) makes a coercive contract provision “unenforceable against any boxer”
 24 to the extent it is “for a period greater than 12 months.” 2000 Enacted H.R. 1832, 106 Enacted H.R.
 25 1832, 114 Stat. 321, §10(a)(1)(B). Indeed, [REDACTED] ZD, Ex.
 26 11 (GBP000003) at 08-09. Further, the existence of independent sanctioning bodies that determine
 27 ranks and titles and implement rules governing *mandatory* challengers and purse bids allow matches
 28 between championship-caliber boxers and existing top-ranked boxers and create real free agency. ZR1
 ¶103, n.216.

1 other promoters. *In re Live Concert Antitrust Litig.*, 863 F. Supp. 2d 966, 974-75 (C.D. Cal. 2012). In
 2 contrast, Dr. Zimbalist *controls* for relative differences in quality and popularity by using Wage Share,
 3 that is, by comparing the *ratio* of athlete compensation to Event Revenue.¹⁰⁴ As Dr. Zimbalist explains,
 4 “because demand for a sport is reflected in the revenue generated, one would expect the ratio of athlete
 5 compensation to revenue to reflect instead the competitive characteristics of the sport, controlling for
 6 any differences in demand or popularity.” ZR1 ¶106.¹⁰⁵

8 ¹⁰⁴ *Blue Cross & Blue Shield United of Wisc. v. Marshfield Clinic*, 152 F.3d 588, 592–93 (7th Cir.
 9 1998), ZD at 9, is inapposite because the defendant there had obtained its large market share lawfully,
 10 “which might confer enough market power on it to enable it all by itself, without dividing markets with
 11 its competitors, to charge a price somewhat above the average for the state.” *Id.* at 593. In contrast, here
 Plaintiffs show that Zuffa’s Exclusive Contracts are unlawful, and they allowed it to obtain its
 monopsony power and *cause* Class damages.

12 ¹⁰⁵ The other cases Zuffa cites, ZD at 8-9, 11, 13-14, are inapposite because they describe the standards
 13 of comparability required to use the yardstick measure for *lost profits for a competing firm*. See *Eleven*
 14 *Line, Inc. v. N. Tex. State Soccer Ass’n, Inc.*, 213 F.3d 198, 208 (5th Cir. 2000) (calculating lost “net
 15 revenue” by comparing to plaintiffs’ other businesses); *Harris Wayside Furniture Co. v. Ideac Media*
 16 *Corp.*, 2008 WL 7109357, at *2 (D.N.H. Dec. 22, 2008) (calculating plaintiffs’ lost profits based on
 17 median profitability of firms surveyed in National Home Furnishing Association 2007 Retail
 18 Performance Report); see also *Loeffel Steel Prods., Inc. v. Delta Brands, Inc.*, 387 F. Supp. 2d 794,
 19 811–14 (N.D. Ill. 2005) (calculating plaintiffs’ “lost future profits or lost business”); *El Aguila Food*
 20 *Prod., Inc. v. Gruma Corp.*, 131 F. App’x 450, 453–54 (5th Cir. 2005) (same); *Muffett*, 2012 WL
 21 12827492, at *3 (calculating lost profits based only on revenue and expense numbers provided by
 22 plaintiff; applying “no yardstick” at all); *Thermotek, Inc. v. Orthoflex, Inc.*, 2016 WL 4678888, at *12
 23 (N.D. Tex. Sept. 7, 2016), *aff’d sub nom.*, 875 F.3d 765 (5th Cir. 2017) (calculating lost profits). In
 24 each of these cases, the expert calculated an “absolute” number for lost profits without accounting for
 25 differences in the comparator group, including quality, size, location, customer base, and costs, among
 26 other things. See, e.g., *Eleven Line*, 213 F.3d at 208; *Harris*, 2008 WL 7109357, at *2-3; *Loeffel*, 387 F.
 27 Supp. 2d at 813; *El Aguila*, 131 F. App’x at 453-54, *ThermoTek*, 2016 WL 4678888, at *12-13. Here,
 28 as explained above, Dr. Zimbalist controls for differences by comparing Wage Share rather than
 absolute compensation. The purpose of Dr. Zimbalist’s yardstick analysis is not to measure the lost
 profits of a competing firm, but to measure the *proportion* of revenue UFC fighters would have been
 paid but for Zuffa’s Scheme. As Dr. Zimbalist explains, his yardsticks represent a conservative and
 thus reliable estimate of the UFC’s Wage Share without the Scheme as long as “the ratio of MRP of
 labor to revenue is no higher in the yardsticks than in the UFC.” ZR2 ¶55. Dr. Blair admits that he does
 not have “[a]ny reason to believe that the . . . ratio of the marginal revenue product of labor to total
 revenue in any of the yardstick sports is higher or lower than that ratio in MMA.” CD2, Ex. 59 (Blair
 Dep. 2) at 315:1-8. Because MRP is a function of the percentage of the event revenue that is
 attributable to the skills and attributes of the athletes, many factors identified by Zuffa such as
 “geographic location,” “amounts charged per team,” and “the number of seasons run,” do not matter for
 comparability, although they might matter for assessing profitability in a lost profits damages model.

1 Zuffa's *attorneys* speculate that alleged differences between the UFC and Dr. Zimbalist's
 2 yardsticks could matter to his analysis. ZD at 11-13. But, again, Dr. Zimbalist controls for many of the
 3 variables Zuffa identifies, such as location, facility condition, and demand for the sport, ZD at 11, 13 &
 4 n.8, by comparing the *ratio* of compensation to revenue. For example, the NFL's higher revenues than
 5 the UFC's may explain why NFL players make more money in absolute terms, but, as Dr. Zimbalist
 6 shows empirically, it does *not* explain why NFL players receive a much higher *share* of revenue, as
 7 Wage Share is not positively correlated with revenue. ZR1 ¶¶118-19, Table 3.¹⁰⁶ Further, Dr. Zimbalist
 8 shows any alleged differences would not undermine his yardsticks. ZR2 ¶¶58-71. He finds that in
 9 MMA, athlete labor is the main input, while his yardstick sports involve additional input factors, so that
 10 MMA fighters are responsible for *at least as high* a fraction of revenues. *Id.* ¶28. For example, he
 11 explains that in baseball, beyond the athletes, fan appeal derives, *inter alia*, from the venue, umpires,
 12 and amenities. *Id.* ¶37 (citing CD2, Ex. 59 (Blair Dep. 2) at 307:1-309:2). Similar inputs are used in the
 13 NFL, NBA, and NHL. *Id.*

14 Zuffa also argues—again, without citing expert testimony or record evidence—that the “Big
 15 Four” sports (MLB, NBA, NFL, NHL) are dissimilar from the UFC because they have “have been
 16 around for decades.” ZD at 11. However, Zuffa offers no reason league age would affect athlete share
 17 of revenue, and Dr. Zimbalist explains why it would not. ZR2 ¶59.¹⁰⁷ Zuffa also notes the structure of
 18 team sports, suggesting there are 30-32 teams competing with each other for players. ZD at 11. But that
 19 competition makes those sports leagues *good* yardsticks, indicating what the UFC's Wage Share would
 20 be with meaningful competition for talent from other MMA promoters. As Dr. Zimbalist explains,
 21 “whenever a player was allowed to become a true free agent in one of the professional sports leagues,
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23 ZD at 11 (citing *Eleven Line*, 213 F.3d at 208). Zuffa similarly makes no showing that the other alleged
 24 differences it identifies would affect Dr. Zimbalist's analysis.

25 ¹⁰⁶ This analysis shows Zuffa's claim that Dr. Zimbalist “performed no empirical analysis” is incorrect.
 26 ZD at 14. He also evaluated the costs incurred by his yardsticks as compared to Zuffa and concluded
 any differences made his yardsticks conservative. ZR1 ¶¶129-138.

27 ¹⁰⁷ Zuffa also cites an article in which Dr. Zimbalist describes the complexity required to *calculate*
 28 comparable player shares of revenue across leagues but offers no reason to question the reliability of
 Dr. Zimbalist's calculation here. ZD at 12 (citing ZD, Ex. 10). Indeed, if anything, Dr. Zimbalist's
 awareness of the complexities presumably made him *more* careful and his calculations *more* reliable.

1 there was a robust market available to bid on that player's services and reveal the player's true
 2 incremental value to the team that needed that player the most." ZR1 ¶88. More generally, Dr.
 3 Zimbalist shows that any other differences between the UFC and his yardsticks make his analysis
 4 conservative, that is, that [REDACTED]
 5 ZR2 ¶¶60-62. Finally, as noted above, Zuffa's speculation—without any evidence—is insufficient
 6 under *Daubert*. See *supra* V.A.4.

7 **D. Dr. Zimbalist's Use of an Average Is Appropriate**

8 Zuffa complains that Dr. Zimbalist uses the average Wage Share of his five yardsticks to
 9 calculate damages. ZD at 15-16; see also *id.* at 3, n.3. But an average is *superior* to any individual
 10 yardstick because it controls for variations between sports. ZR2 ¶70. And a reasonable estimate—not
 11 perfect precision—is all that is required in calculating damages. See *supra* V.D.1. Some differences will
 12 inevitably make an estimate imperfect, although the [REDACTED]
 13 [REDACTED] makes that result robust. Contrary to Zuffa's assertion, the use of averaging does not in itself
 14 undermine the reliability of a yardstick. See, e.g., *Image Tech.*, 125 F.3d at 1221 (upholding award of
 15 damages based in part on expert's use of "averaged annual composite growth of the other ISOs' non-
 16 Kodak revenues" as a yardstick).¹⁰⁸ Indeed, even the cases Zuffa cites turn on the reliability of the data
 17 that was averaged, not averaging itself. See, e.g., *Eleven Line*, 213 F.3d at 208 (rejecting yardstick
 18 because expert provided no evidence that yardstick properties were of "reasonable similarity"); *Everett*
 19 *Fin., Inc. v. Primary Residential Mortg., Inc.*, 2016 U.S. Dist. LEXIS 181517, at *19 (N.D. Tex. Dec.
 20 19, 2016) (same); *CDW LLC v. NETech Corp.*, 2014 WL 272167 (S.D. Ind. Jan. 24, 2014) (same).
 21 Moreover, even if the Court excludes any of Dr. Zimbalist yardsticks, his methodology allows him to
 22 calculate damages using those that remain. ZR2 ¶70.

23 **E. Dr. Zimbalist's Yardsticks Properly Measure the Damages Zuffa Caused**

24 Zuffa claims that Dr. Zimbalist must not only measure the amount of the Bout Class damages—
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26 ¹⁰⁸ See also *In re Live Concert Antitrust Litig.*, 2011 WL 13136259, at *2 (C.D. Cal. Jan. 4, 2011) ("the
 27 alleged 'averaging' techniques presented by Plaintiffs' expert [are] more a question of fact than law. As
 28 the cases cited by both parties bear out, whether averaging is appropriate depends on the circumstances
 of the case"); *In re Nexium (Esomeprazole) Antitrust Litig.*, 297 F.R.D. 168, 182 (D. Mass. 2013)
 (expert "quite properly" employed a "'yardstick' approach, utilizing average measures").

1 which he does—but also show that the Scheme *caused* injury. ZD at 16. But, as Zuffa admits, that is
 2 not his assignment. ZD at 1. *Dr. Singer* addresses causation and fact of damage. SR1 ¶¶178-192, 209-
 3 232. Dr. Zimbalist calculates the *amount* of damages. ZR1 ¶¶104-126. As a result, the cases Zuffa cites
 4 on *fact of injury* do not bear on Dr. Zimbalist’s analysis. *See, e.g., Rebel Oil Co.*, 51 F.3d at 1433 (“**To**
 5 **show antitrust injury**, a plaintiff must prove that his loss flows from an anticompetitive aspect or effect
 6 of the defendant’s behavior”) (emphasis added).¹⁰⁹

7 Dr. Singer shows that without Zuffa’s Scheme, it would have paid its Fighters a Wage Share at
 8 approximately competitive levels. *Supra* at 10. Dr. Zimbalist therefore appropriately measures damages
 9 by comparing Zuffa’s actual Wage Share to the Wage Share it would have paid in a more competitive
 10 market. ZR1 ¶¶105-06. Zuffa complains that Dr. Zimbalist did not “evaluate the damages for different
 11 types of conduct he identifies as included within the challenged conduct.” ZD at 16. But Dr. Zimbalist
 12 has no need to do that. Again, he measures the *amount of damages* Zuffa caused by restricting
 13 competition for Fighters’ services. Further, Plaintiffs need only show the harm caused by the Scheme as
 14 a whole; they need not attribute portions of the damage to particular conduct. A case Zuffa itself cites,
 15 *In re Rail Freight*, 2017 WL 5311533, at * 58, specifically rejects efforts, like Zuffa’s here, to force
 16 plaintiffs to separate out the parts of a single Scheme. *See id.* at *56 (“The Supreme Court’s decision in
 17 *Comcast* does not require separating the elements of plaintiffs’ theory of liability as defendants
 18 implicitly do on remand. ‘[T]he character and effect of a conspiracy are not to be judged by
 19 dismembering it and viewing its separate parts, but only by looking at it as a whole.’ *Cont’l Ore Co. v.*
 20 *Union Carbide & Carbon Corp.*, 370 U.S. 690, 699 (1962) (citation omitted).”) (alterations in original).

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¹⁰⁹ Nor do the other cases Zuffa cites support its position. As discussed above, *supra* at 34, n.58: *Concord Boat Corp.*, 207 F.3d at 1055, ZD at 16, merely notes the district court had required plaintiffs to explain how the “‘but for’ market” would be different without the illegal conduct; it did not suggest how specific the plaintiffs had to be. Similarly, *Murphy Tugboat*, 658 F.2d at 1262, ZD at 16, merely holds that economic rationality should be presumed, which Dr. Zimbalist does. *In re Online DVD Rental*, 2011 WL 5883772, at *15, ZD at 16, involved summary judgment, not *Daubert*. *Apple, Inc. v. Samsung Elecs. Co.*, 2012 WL 2571332 (N.D. Cal. June 30, 2012), ZD at 17, excluded the opinion of a defense expert in a patent infringement case where the expert apportioned damages in direct contravention to the relevant patent laws. *Williamson Oil Co. v. Philip Morris USA*, 346 F.3d 1287, 1322-23 (11th Cir. 2003), involved expert testimony on liability for collusion where the definition of collusion used by the expert conflicted with controlling case law.

1 In any case, Dr. Zimbalist demonstrates that the Scheme “ [REDACTED] ” ZR1

2 [REDACTED]

3 ¶¶10-22. He also explains how Zuffa’s contractual restrictions *caused* Wage Share suppression, just as

4 did similar restrictions in his yardstick sports until they were eased and competition drove Wage Share

5 up. *Id.* ¶¶25-71, 89-103.

6 Zuffa identifies only one alleged alternative explanation for the difference in Wage Share

7 between the UFC and Dr. Zimbalist’s yardsticks—unionization. ZD at 17. Once again, Zuffa does not

8 cite expert testimony or other evidence. Further, as discussed above, all of the economic experts in this

9 case agree that sports owners would be willing to pay athletes no more than their MRP, ZR2; CD2, Ex.

10 58 (Blair Dep. 1) at 177:13; TR1 ¶130—regardless of whether they arrive at that amount through labor

11 negotiations or otherwise. So Dr. Zimbalist’s yardsticks remain appropriate as a (conservative) measure

12 of Wage Share in a competitive market, even if the yardsticks involve unions. In addition, Dr. Zimbalist

13 explains that players’ unions in team sports do not negotiate collectively over player compensation, but

14 instead negotiate for rules that *enhance competition* in the labor market, such as free agency. ZR2

15 ¶63.¹¹⁰ As Dr. Blair, admits, “the actual salaries that the players end up negotiating with their teams are

16 determined by market forces for free agents.” CD2, Ex. 58 (Blair Dep. 1) at 177:13-19. Dr. Blair also

17 agrees with empirical research showing that even with collective bargaining, free agents make *less* than

18 the competitive wage, and players who do not have free agency make *substantially less*, confirming

19 that Dr. Zimbalist’s yardsticks are conservative. *Id.* at 161:5-163:2. That makes sense because when

20 players unionize, they lose the right to sue under the antitrust laws, enabling owners to coordinate,

21 including through salary caps and other wage and mobility restrictions, so that athlete pay remains

22 somewhat below competitive levels. Finally, the “union” criticism does not apply at all to boxing,

23 which has no unions. ZR2 ¶65.¹¹¹

24

25 ¹¹⁰ *Sebastian Int’l, Inc. v. Russolillo*, 2005 WL 1323127 (C.D. Cal. Feb. 22, 2005), is not relevant, as it

26 involved summary judgment against a claim under California law for intentional interference with

27 contractual relations where the expert failed to distinguish between damages caused by the challenged

28 conduct and “other causes unrelated to the alleged wrong.” *Id.* at *7.

¹¹¹ Zuffa argues that boxing alone cannot support Dr. Zimbalist’s damages analysis. ZD at 17 n.11. This

F. Dr. Zimbalist's Boxing Data Reliably Measures Wage Share in Boxing

Zuffa claims Dr. Zimbalist does not reliably measure Wage Share in boxing for Golden Boy, a promoter, because he allegedly relies upon “*opinions* developed by another expert,” specifically an expert report by Gene Deetz in a separate lawsuit, without independent verification of the underlying expert’s work. ZD at 20 (emphasis added). However, Dr. Zimbalist did not rely on any *opinions* from the report, but only on the underlying *data*—which lists revenues and costs for each Golden Boy boxer from January 2014 to June 2016. ZR2 ¶83. Expert opinions that rely on other expert reports are admissible if the reports “are of a type reasonably relied upon by experts in the field in forming opinions.” *Gray v. United States*, 2007 U.S. Dist. LEXIS 17937, at *21 (S.D. Cal. Mar. 12, 2007) (distinguishing *Imperial Credit* because plaintiff’s expert was qualified to evaluate third party expert report and denying motion to exclude).¹¹² The data attached to the Deetz report list individual payments to each boxer annually, allowing direct calculation of actual boxer compensation. CD2, Ex. 82 (Deetz Report with attached data titled “Support to Exhibit 3”) at 3-12. Thus, unlike in *Doan v. Astrue*, 2010 WL 234935, at *4 (S.D. Cal. Jan. 12, 2010), Dr. Zimbalist did “independently verify” Deetz’s calculation because he “viewed th[e] source and verified the data.” *Id.*¹¹³

is wrong, as a single yardstick may suffice to determine damages. *See, e.g., Tawfilis*, 2017 WL 3084275, at *8. Moreover, Dr. Zimbalist need not rely on boxing alone because the Wage Share in boxing *confirms* that his other yardsticks assess the effect of competition for talent, *not* collective bargaining.

¹¹² *See also Scott v. Ross*, 140 F.3d 1275, 1286 (9th Cir. 1998) (expert’s “citations to his extensive studies and to his collaboration with other academics as the basis for his opinions suffice to merit admission of his testimony”); *United States v. Brown*, 299 F.3d 1252, 1257 (11th Cir. 2002) (same) (quoting CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 455 (3d ed. 2000)).

¹¹³ Zuffa criticizes Dr. Zimbalist’s reliance on the Deetz data, ZD at 26, but that data was produced in litigation and Zuffa suggests no reason to question its accuracy. And in fact, Dr. Zimbalist verified the data by [REDACTED]. ZR2 ¶¶85-86. *Doan v. Astrue*, 2010 WL 234935, at *4 (S.D. Cal. Jan. 12, 2010), is also inapposite. There the expert relied on data from a newspaper article, not a primary source, and there was no record that the expert “ever viewed this source and verified the data.” *Id.* Here Dr. Zimbalist viewed the underlying data and confirmed Deetz’s calculation of Wage Share was accurate. Zuffa’s reliance on *In re Imperial Credit Indus. Sec. Litig.*, 252 F. Supp. 2d 1005, 1012 (C.D. Cal. 2003), is also misplaced. It held that the expert there—an accountant with no experience in residual valuation—could not merely rely on a report by a third-party residual valuation expert. Here, Dr. Zimbalist has spent decades analyzing sports data and is an

1 Zuffa offers competing data it claims are more reliable than Dr. Zimbalist's, and asserts that his
 2 sole basis for preferring his own data is that the "numbers . . . are larger." ZD at 21. Untrue. Dr.
 3 Zimbalist's rejects Zuffa's data because they are obviously flawed. The detailed fighter-by-fighter data
 4 attached to the Deetz report show, for example, that one fighter alone, Saul Alvarez, earned \$13.3
 5 million in purses in 2016, while Zuffa's "data" [REDACTED]
 6 [REDACTED]. ZR2 ¶¶84. That egregious discrepancy confirms the data on which
 7 Zuffa relies are incomplete. In fact, they are not data at all, [REDACTED]
 8 [REDACTED], ZD, Ex. 12, GBP000001, ZD, Ex. 13, GBP000002, and Dr. Blair admitted [REDACTED]
 9 [REDACTED].
 10 See CD2, Ex. 59 (Blair Dep. 2) at 321:25-322:10. Zuffa's only basis for preferring that incomplete data
 11 is that they were "produced in this case." ZD at 21.

12 Zuffa also criticizes Dr. Zimbalist for basing his boxing yardstick on only a single promoter,
 13 Golden Boy, and claims that Dr. Zimbalist has "offered no evidence to suggest that Golden Boy is
 14 representative of . . . other boxing promoters, or the boxing industry." ZD at 22. Zuffa is mistaken. In
 15 Dr. Zimbalist's rebuttal, he includes additional data from boxing promoter Top Rank, Inc. and
 16 calculates the average Wage Share including both Golden Boy and Top Rank [REDACTED] ZR2 ¶¶85-86,
 17 Table 1, [REDACTED]. He also relies on deposition testimony
 18 from Bob Arum, a well-established boxing promoter, that [REDACTED]
 19 [REDACTED]. *Id.* ¶¶85, 88; CD2, Ex. 53 (Arum Dep.) at 89:15-92:2. Again, that makes Dr.
 20 Zimbalist's damages calculation conservative.

21 VII. CONCLUSION

22 For the foregoing reasons, Zuffa's *Daubert* motions challenging the testimony of Drs. Singer
 23 and Zimbalist should be denied.

24
 25
 26
 27 acknowledged expert in the field. Finally, *Tokio Marine & Fire Ins. Co. v. Norfolk & W. Ry. Co.*, 1999
 28 WL 12931, at *4 (4th Cir. Jan. 14, 1999), ZD at 21, is inapposite because Dr. Zimbalist is not testifying
 on Mr. Deetz's *conclusions*, but just using his *data*.

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Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 6th day of April, 2018 a true and correct copy of **PLAINTIFFS' CONSOLIDATED BRIEF IN OPPOSITION TO DEFENDANT ZUFFA, LLC'S MOTION TO EXCLUDE THE TESTIMONY OF DRS. HAL SINGER AND ANDREW ZIMBALIST (ECF NOS. 522, 524)** and supporting papers was served via email on all parties or persons requiring notice.

/s/ Eric L. Cramer

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